

1910.

ANNUAL REPORT
OF THE
DEPARTMENT OF AGRICULTURE
OF THE
PROVINCE OF ALBERTA

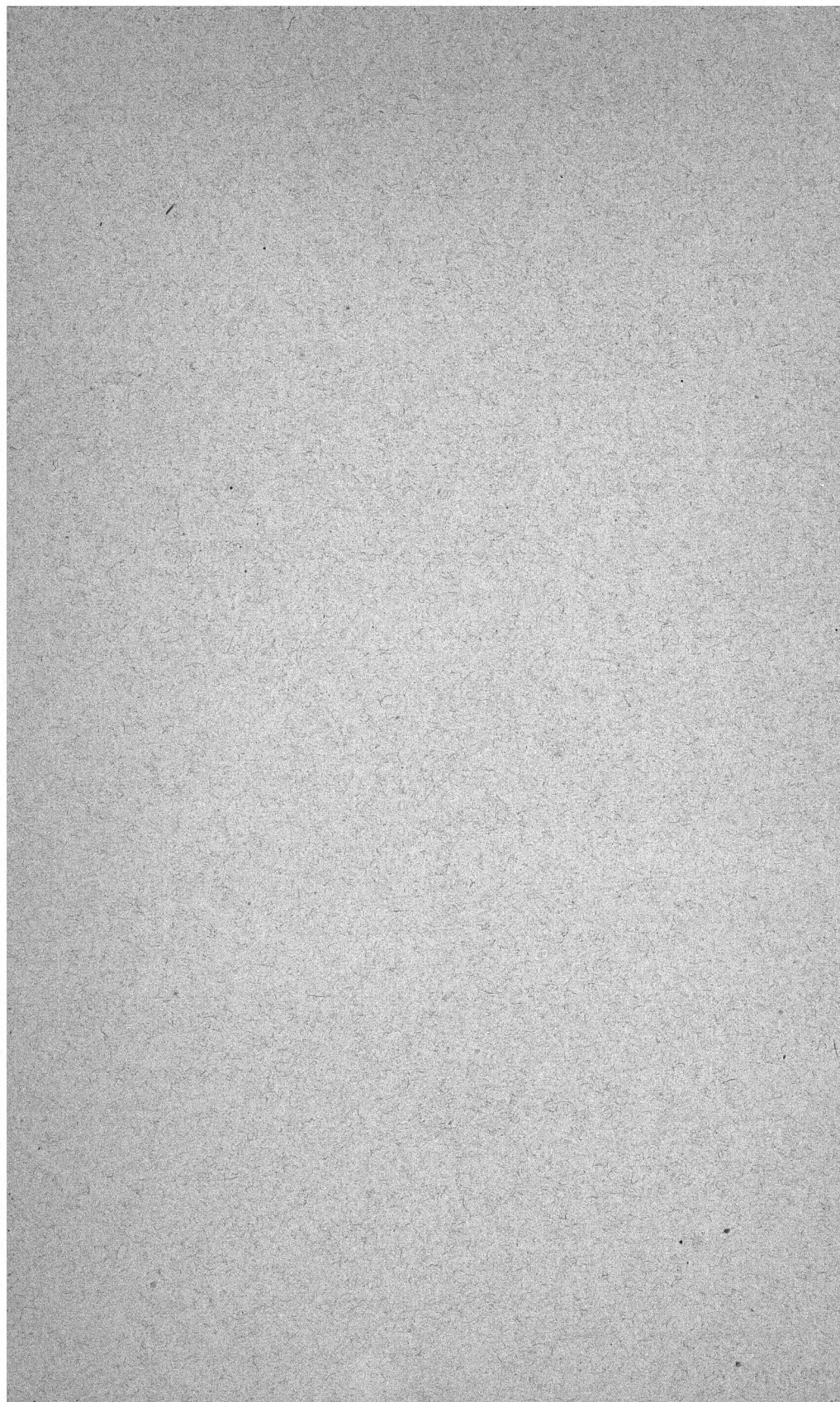
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EDMONTON.
JAS. E. RICHARDS, GOVERNMENT PRINTER
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DEPARTMENT OF AGRICULTURE,
EDMONTON, January 27, 1911.

To His Honour
GEORGE HEDLEY VICARS BULYEA,
Lieutenant Governor of the Province of Alberta.

SIR,—

I have the honour to submit herewith the Report of the
Department of Agriculture for the year 1910.

I have the honour to be, Sir,
Your obedient servant,

DUNCAN MARSHALL,
Minister of Agriculture.

REPORT
OF THE
DEPARTMENT OF AGRICULTURE

DEPARTMENT OF AGRICULTURE,
EDMONTON, January 25, 1911.

HON. DUNCAN MARSHALL, Esq.,
Minister of Agriculture.

SIR,—I have the honour to submit herewith a report covering the work of the Department of Agriculture for the year 1910. The activities of the Department cover a wide range and for administrative purposes have been grouped into branches as far as possible. Those activities which it has not been possible or advisable to so group are handled by what is termed the general office, and they will be found in the report of the Deputy Minister.

1. Report of the Deputy Minister.
2. Report of the Dairy Commissioner.
3. Report of the Chief Inspector of Noxious Weeds.
4. Report of the Game and Fire Guardian.
5. Report of the Poultry Superintendent.
6. Report of the Recorder of Brands.
7. Report of the Superintendent of Fairs and Institutes.
8. Report of the Live Stock Commissioner.
9. Report of the Provincial Health Officer.
10. Report of the Sanitary Engineer.
11. Report of the Director of the Laboratory.
12. Report of the Publicity Commissioner.
13. Appendices—
 - a—Report of the Alberta Horse Breeders' Association.
 - b—Report of the Alberta Cattle Breeders' Association.
 - c—Report of the Alberta Swine Breeders' Association.
 - d—Report of the Alberta Sheep Breeders' Association.
 - e—Report of the Alberta Natural History Association.

I have the honour to be, Sir,

Your obedient servant,

GEO. HARCOURT,
Deputy Minister of Agriculture.

1.—REPORT OF THE DEPUTY MINISTER.

SIR,—In the work of the general office there has been grouped those activities of the Department not placed under one of the branches. These activities being of a very diversified nature make it somewhat difficult to group them satisfactorily for a report. In all cases the work of the general office is closely related to and dovetailed into that of the branches. Indeed, some of it should rightly be administered by the branch it properly belongs to, but office space and arrangements do not permit for the present. However for convenience the following grouping has been made:

- I.—Live Stock.
 - II.—Crops.
 - III.—Museum.
 - IV.—Fruit Experimental Stations.
 - V.—Vital Statistics.
 - VI.—Provincial Seed Fair.
 - VII.—Miscellaneous.
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I.—LIVE STOCK

The general health of the live stock of the province during the year was good. Stock of all classes came through the winter in excellent shape. The increase in the young of all classes of stock was very satisfactory with the exception of one district where fully ninety per cent. of the foal crop was lost through contagious abortion, and in another where the litters of young pigs did not live. The summer season proved somewhat dry causing pastures to shrink so alarmingly and the prospects for obtaining hay for winter feeding to be so remote that some ranchers in alarm began selling their stock. The movement was not large. The courageous ones held on to their stock and were rewarded by an abundant growth later on. Feed, however, was somewhat scarce and cattle were barely in proper condition when winter set in.

The report of the Live Stock Commissioner's branch deals with general conditions of the stock industry and fuller details of the season's work will be found therein.

ENROLMENT OF STALLIONS.

The provisions of The Horse Breeders' Ordinance require the owner of every stallion, who stands his horse for profit or gain, to have him enrolled in the books of the Department. Under the authority vested in him by the Ordinance the Minister of Agriculture has decided that only those stallions recorded in the stud book kept under the authority of, or those foreign stud books approved and recognized by, the Canadian National Live Stock Records of Ottawa, shall be eligible for enrolment as purebred stallions.

These Canadian stud books are as follows:

Clydesdale Stud Book of Canada.
 Canadian Hackney Stud Book.
 Canadian Shire Horse Stud Book.
 Canadian Percheron Stud Book.
 Canadian Thoroughbred Stud Book.
 Canadian Belgian Draft Stud Book.
 French Canadian Horse Breeders' Stud Book.
 Canadian Pony Stud Book.
 Canadian French Coach Stud Book.
 Canadian Suffolk Horse Stud Book.
 Canadian Standard Bred Stud Book.

The following foreign stud books are recognized by the Canadian National Live Stock Records and stallions possessing registration in these records will be entitled to enrolment in the books of the Department as purebred:

Cleveland Bay Stud Book.
 Yorkshire Coach Horse Stud Book.
 American Morgan Register.
 American Saddle Horse Register.
 Ostfriesisches Stutbuch.
 Stutbuch der Munsterlandisch-Oldenburgischen Geest.
 Oldenburger Stutbuch.
 Gestutbuch der Holsteinischen Marschen.

Grade certificates are issued for horses which are not of pure breeding, and those horses recorded in unrecognized stud books.

During the year 249 purebred and 225 grade stallions were enrolled.

The following is a summary of the stallions that have been enrolled during the past and preceding years:

TOTAL ENROLMENT OF STALLIONS IN PROVINCE.

BREED	YEAR						
	1904	1905	1906	1907	1908	1909	1910
Clydesdale	68	25	81	86	95	101	125
Percheron	16	10	35	56	52	54	65
Standard Bred	8	2	10	15	15	20	14
Shire	10	4	10	18	11	11	12
Hackney	5	1	2	8	8	10	5
French Draft	2	4	5	2	8	5	0
Thoroughbred	3	1	10	8	6	5	10
Suffolk	3	0	3	4	6	4	4
Belgian	1	0	2	9	5	3	10
French Coach	2	2	2	0	4	3	2
German Coach	0	0	0	2	2	0	0
American Saddle Horse	0	0	0	0	1	0	1
Cleveland Bay	0	0	1	0	0	0	0
French Canadian	0	0	1	0	0	0	0
Hunter	0	0	0	0	0	0	1
Total Pure Breds	118	49	162	208	213	216	249
Total Grades	151	98	329	334	269	231	225
Total Enrolment	269	147	491	542	482	447	474

Total enrolment in seven years, Pure Bred..... 1,215
 Total enrolment in seven years, Grade..... 1,637

Total..... 2,852

Reference to the above table will show that for the first time since the work of enrolment was undertaken the number of pure bred stallions entered on the books of the Department exceeds those of grades. It is pleasing to be able to report this and it is hoped that the near future will see the use of grade sires absolutely abandoned. Even yet the total number of grades travelling in the province outnumber the purebreds. In a province so admirably adapted to horse raising, such a state of affairs should not exist. It must not be forgotten, of course, that there are many purebred sires that are not enrolled. They are held by their owners for their own studs and as such do not require to be entered on the books of the Department.

ANIMALS RUNNING AT LARGE.

Under this heading is grouped a report on the workings of four Ordinances, namely, The Stray Animals Ordinance, dealing with the disposal of animals found on the premises of parties other than their owner; The Entire Animals Ordinance, providing for the safety of breeding stock on the open range by prohibiting the running at large of stallions over one year, and bulls over nine months old; The Herd Ordinance (applicable only in a limited area), providing for the fencing in of all stock during the crop season, thus reducing the amount of fencing required; and The Pound Districts Ordinance, under the provisions of which farmers in well settled districts can regulate the running at large of all animals by impounding those not under proper control and assessing damages where it breaks through a lawful fence.

THE STRAY ANIMALS ORDINANCE.

The working of the last amendments to The Stray Animals Ordinance, whereby it was necessary for a brand reader to visit, inspect, and report on all estrays, has worked to great advantage. Brand readers are now appointed in practically all districts, and it is hoped their work will continue as satisfactory as it has already proven to be.

The following brand readers have been appointed:

NAME	ADDRESS
John A. Burke.....	Ferry Point.
A. J. Hills.....	Daysland.
Perry Hubbell.....	Edensville.
C. D. Brownfield.....	Brownfield.
Geo. T. Campbell.....	Wanda.
Andrew Leslie.....	Duhamel.
Ovide Blouin.....	Ferry Point.
H. N. Lockwood.....	Provost.
Norman Blatchford.....	Innisfree.
Ed. G. Symington.....	Provost.
C. W. Mickle.....	Spring Bank.
Henry Frey.....	Barons.
Neil Nicholson.....	Granum.
Percy Kneeshaw.....	Gaetz Valley.
N. Frank Austin.....	Cardston.
N. Neilson.....	Taber.
R. A. Pilling.....	Cardston.
Percy W. Rubbra.....	Carstairs.
W. B. Thorne.....	Aldersyde.
C. Nixon.....	Manfred.
G. H. Bawtinheimer.....	Red Deer.
Henry Brace.....	Notre Dame de Savoy

NAME	ADDRESS
Jas. S. Parker.....	Mountain View.
David J. Witwer.....	Acme.
Thos. H. Dangan.....	Nanton.
Wm. Ross.....	Round Hill.
Thos. Sigurdson.....	Solheima.
A. J. Cameron.....	Ghost Pine Creek.
W. K. Evans.....	Three Hills.
Peter McElroy.....	Nanton.
E. Miller.....	Strome.
Walter Sharpe.....	Sedgewick.
L. N. Bull.....	Hastings Coulee.
E. S. Stanley.....	Gilby.
O. A. Hastings.....	Hastings Coulee.
R. V. Campbell.....	Daysland.
C. H. Schneider.....	Flagstaff.
J. F. Harris.....	Flagstaff.
T. J. Coppock.....	Ingletton.
George Scott.....	Okotoks.
A. E. Hunter.....	Claresholm.
John Wright.....	Monarch.
Lawrence Doyle.....	Carmangay.
D. A. Hart.....	Ohaton.
Donald Smith.....	Evarts.
Thos. J. Ross.....	Clive.
A. C. Smith.....	Wabamun.
Elias Pilling.....	Leavitt.
Harvey Kibbe.....	Edberg.
Noah Wakeford.....	Gladys.
Oliver Gibbon.....	Erskine.
Jas. Tees.....	Valley City.
E. J. Thorne.....	Aldersyde.
Jas. B. Erickson.....	Camrose.
Geo. Bourque.....	Farling.
Geo. Blackly.....	New Sarepta.
Geo. Todd.....	Thigh Hills.
H. C. Sparby.....	Bawlf.

During the year there were 769 estray cattle and 405 estray horses advertised in the official Gazette; of this number 116 cattle and 78 horses were sold. There were also 5 estray pigs advertised in the official Gazette, none of which were sold.

The following is a statement giving particulars of those sold:

SALES OF ANIMALS UNDER THE STRAY ANIMALS ORDINANCE.

JUSTICE	ADDRESS	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Procs'ds of Sale	Sent to Department
Hare, A. C.	Tees	Barrow hog.	Aug. 25, 1909	Apr. 15, 1909	June 6, 1910	\$13 00	\$1 83
Fane, F.	Beaver Lake.	Steer, red unbranded.	May	Nov. 30, 1909	Feb. 10, 1910	13 00	13 00
Gray, W. B.	Stettler	Steer, black, mules, blotched brand on left hip.	Dec. 20, 1909	Jan. 30, 1910	Mar. 23, 1910	47 00	31 35
"	"	Steer, Hereford, with white markings, branded N 2, half diamond under, on right ribs.	Dec. 20, 1909	Jan. 30, 1910	Mar. 23, 1910	50 50	27 93
"	"	Steer, roan, four years old, branded indistinct brand something like a rowlock monogram, X, on left ribs.	Nov. 1, 1909	Jan. 15, 1910	Apr. 19, 1910	30 00	15 25
"	"	Steer, red and white, 3 years old, left ear cropped, branded reversed L, X, half diamond under, on right ribs.	Jan. 15, 1910	Mar. 31, 1910	May 16, 1910	51 00	34 35
"	"	Steer, red, one horn, on right ribs, 7 years old, branded lazy quarter circle under, on left side.	Jan. 16, 1910	Mar. 31, 1910	May 16, 1910	23 00	7 03
"	"	Cow, red, little white, 4 years old, branded cross, inverted Y, bar over right ribs, X, rowlock inverted, half diamond, on right side.	Jan. 15, 1910	Mar. 31, 1910	May 16, 1910	26 00	9 95
"	"	Heifer, roan, veiling, left ear cropped, branded I, reversed inverted F, quarter circle down over, on right ribs.	Feb. 15, 1910	Mar. 31, 1910	May 16, 1910	9 00	.....
"	"	Steer, roan, stub horns, branded round topped T, upper quarter circle over, on right thigh, the same on right shoulder.	Dec. 25, 1908	Mar. 31, 1910	May 16, 1910	51 50	34 80
"	"	Cow and calf, both white, cow 5 years old, branded reversed inverted 6 4, on right ribs, notch in right ear.	Jan. 1, 1910	Mar. 31, 1910	June 14, 1910	58 00	34 61
"	"	Cow, roan, rising 4 years old, both ears cropped, stub horns, branded running 2 followed by half circle with quarter circle over, on left rib.	Dec. 1, 1909	Mar. 31, 1910	June 14, 1910	33 50	20 98
"	"	Bull calf, roan, no visible brand.	Dec. 1, 1909	Jan. 31, 1910	June 14, 1910	11 00	.....
"	"	Heifer, red and white, two years old, small crop left ear, dewlap white, branded 9 X with bar over, on left hip.	Nov. 15, 1909	Mar. 31, 1910	June 14, 1910	23 00	7 64
"	"	Heifer, red, vearding, small and scrubby, half of tail bobbed off, no visible brand.	Nov. 1, 1909	Feb. 15, 1910	June 14, 1910	17 00	.....
"	"	Cow, red, part white, about 6 years old, small notch on top of right ear, undercut left ear, branded reversed inverted J, on right hip.	Dec. 1, 1909	Apr. 15, 1910	July 4, 1910	22 00	7 55
"	"	Steer, vearding, Hereford, no visible brand.	Dec. 1, 1909	Apr. 15, 1910	July 4, 1910	14 00	13 65
"	"	Cow, red and white, about 6 years old, branded 6 T bar over, on left ribs, and a reversed L followed by T with half diamond over, on right hip, red bull calf at foot.	Dec. 1, 1909	Apr. 15, 1910	July 4, 1910	22 50	8 04
"	"	Steer, red, part white, 3 years old, branded lazy E, on right hip.	Dec. 1, 1909	Apr. 15, 1910	July 4, 1910	36 00	21 20
"	"	Steer, red and white, coming 4 years old, branded lazy M, followed by lazy L, bar across and bar under, both on right ribs.	Dec. 1, 1909	Apr. 15, 1910	July 4, 1910	41 00	26 07
"	"	Steer, red, two years old, blotched brand resembling M 9 with half diamond over, on right hip.	Dec. 1, 1909	Apr. 15, 1910	July 4, 1910	33 00	18 28

Gray, W. B.	Stettler	Steer, red, 3 years old, one horn, branded reversed G, with lazy L reversed, with bar over, on left ribs.	Dec. 1, 1909	Apr. 15, 1910	July 4, 1910	39.00	24.13
"	"	Heifer, red and white, two years old, branded reversed G with reversed lazy L, bar over, on left ribs.	Dec. 1, 1909	Apr. 15, 1910	July 4, 1910	30.00	15.35
"	"	Steer, red, mulley, long yearling, small split on top of right ear no visible brand.	Dec. 1, 1909	Apr. 15, 1910	July 4, 1910	29.00	14.38
"	"	Cow, roan, stub horns, about 9 years old, branded X quarter circle under, on right jaw, and bar on right hip.	Dec. 1, 1909	Apr. 15, 1910	July 4, 1910	23.00	8.53
"	"	Steer, about two years old, red, half crop on right ear, branded 5 R half diamond over, on left ribs, and lazy T on left hip.	Dec. 1, 1909	Apr. 30, 1910	July 4, 1910	22.00	12.20
"	"	Steer, about 3 years old, red, little underslope on left ear, branded lazy T, on left hip.	Dec. 1, 1909	Apr. 30, 1910	July 4, 1910	30.00	20.00
"	"	Steer, about 2 years old, mulley, black, branded lazy T, on left hip.	Dec. 1, 1909	Apr. 30, 1910	July 4, 1910	25.50	15.61
"	"	Heifer, Hereford, long yearling, branded inverted rowlock, H, with half diamond under, on right shoulder.	Dec. 1, 1909	Apr. 30, 1910	July 4, 1910	17.00	7.33
"	"	Steer, red and white, 4 years old, blotched brand resembling 89, half diamond over, on left ribs, also a split key and R bar under, on right ribs, also inverted U followed by P, bar over, on right ribs, half crop and split, right ear.	Dec. 1, 1909	Apr. 15, 1910	July 4, 1910	22.00	7.55
"	"	Steer, roan, about two years old, wattle on neck, branded rowlock and inverted rowlock, bar under, on left hip.	Dec. 1, 1909	Apr. 15, 1910	July 4, 1910	41.00	26.08
"	"	Steer, red and white spotted, 3 years old, under notch in both ears, dehorned, branded V 2, bar over, on right hip.	Dec. 1, 1909	Apr. 15, 1910	July 4, 1910	28.00	13.40
Benson, John	Medicine Hat	Mare, bay, branded half circle F, reversed, with small circle attached to bottom, on left thigh, about 14 years old.	Dec. 1, 1909	Mar. 31, 1910	Aug. 16, 1910	25.00	9.25
"	"	Mare, and colt at foot, brown, branded S, with a hanging K, on right shoulder.	Apr. 1909	June 30, 1909	Feb. 19, 1910	25.00	17.88
"	"	Mare, gray, branded E with small capital N attached at the right end of lowest bar of the E, centre bar of the E deflected, slightly upward, and left end of same connected with right end of top bar of E, on right shoulder, right ear split, 7 years old.	Apr. 1909	June 30, 1909	Feb. 19, 1910	20.00	13.50
"	"	Steer, white with red neck and legs, branded bar X on right hip.	Apr. 1909	June 30, 1909	Feb. 19, 1910	20.00	13.50
Campbell, Wm	Holden	Horse, bay, blazed face, 9 years old, 4 white feet, lazy B on right thigh, tail trimmed straight.	Apr. 1909	June 15, 1909	Jan. 18, 1910	52.50	41.24
"	"	Mare, gray, age about 4 years, colt at side, both hind feet white, branded 72, on left shoulder.	July 1909	Mar. 15, 1910	May 16, 1910	60.50	43.65
Phillips, C. B.	Ponoka	Steer, 3 years old, branded X Y, right ribs, and N T, bar over, left shoulder.	July 1909	May 31, 1910	Aug. 2, 1910	117.00	98.71
Davidson, D.	Daysland	Mare, black, star on forehead, age about 2 years, branded V L, on foreleg, yearling, no visible brand.	Jan. 1910	Jan. 31, 1910	May 20, 1910	21.00	2.25
Anderson, P. B.	Bardo	Heifer, black, yearling, no visible brand.	May 18, 1909	Aug. 14, 1909	Oct. 20, 1909	65.00	57.40
"	"	Gelding, bay, about 1,200 pounds, branded X or 4, inside circle, on left shoulder, not very plain.	Sept. 30, 1909	Dec. 31, 1909	Mar. 3, 1910	15.50	3.65
Morkeberg, D. J.	Markerville	Heifer, red, two years old, in spring, branded reversed K 2, left shoulder.	July 1, 1909	July 15, 1909	Mar. 21, 1910	60.00	46.05
McDonald, J. S.	Sedgewick	Mare, bay, weight about 875 pounds, star in forehead, shod, indistinct brand on right shoulder.	Nov. 1, 1909	Jan. 31, 1910	Apr. 12, 1910	12.25	.....
			Oct. 1, 1909	Jan. 15, 1910	Mar. 26, 1910	72.00	54.40

SALES OF ANIMALS UNDER THE STRAY ANIMALS ORDINANCE.—Continued.

JUSTICE	ADDRESS	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Procs'ds of Sale	Sent to Department
McDonald, J. S.	Sedgewick ..	Gelding, light bay, white face, left front leg white to knee, left hind leg white to hock, small white spot on right hoof, age about 8 years, weight about 900 pounds, no brand visible ..	Nov. 1, 1909	Feb. 28, 1910	May 7, 1910	\$72 00	\$55.75
Mills, H. D.	Wetaskiwin..	Mare, buckskin, black points, branded cross, reversed J, on left shoulder, lazy T and X, on left hip, dark buckskin horse colt at foot.....	1909	Jan. 15, 1910	Feb. 12, 1910	53 00	35.38
"	"	Horse, 6 years old, white saddle mark on left side of back, cross on right shoulder, and right half diamond, bar, left half diamond connected on left hip.....	1909	Dec 15, 1910	Feb. 24, 1910	32 50	16.70
"	"	Cow, red, with horns turned down, bob tail, no visible brand, red bull calf at foot.....	Nov. 1, 1909	Jan. 31, 1910	Apr 4, 1910	20 50	3 10
"	"	Mare, brown, long tail, white along back, white face, no visible brand.....	Feb. 10, 1910	Feb. 28, 1910	May 2, 1910	50 00	36 65
Mitchell, D.	Stettler.	Gelding, brown, 4 or 5 years old, two white hind legs, long tail, white face, no visible brand.....	Feb. 10, 1910	Feb. 28, 1910	May 2, 1910	45 00	31 81
Tod, A. W.	Mannville....	Cow, red, aged, some white on head, white underline, has horns, short tail, tag on ear, with E Goater, Lamerton, on one side, and 44 on the other side, both stamped, branded 39, half circle under, on left ribs.....	Dec. 28, 1909	Jan 15, 1910	Mar. 21, 1910	16 00	2 48
Layton, S. J.	Taber.....	Horse, bay, pony, star in forehead, about 10 years old, branded C inside of diamond, on left shoulder, same on right thigh.....	June 1909	Nov. 30, 1909	Feb 5, 1910	15 50	
"	"	Mare, sorrel, about 600 pounds, stripe in face, branded star on left thigh.....	Oct. 1908	Oct. 15, 1909	Feb. 7, 1910	25 00	21 80
Smith, F. C.	Lamont.....	Cow, yellow, about 9 years old, in fair condition, no visible brand.....	Mar. 1, 1910	Mar 15, 1910	May 25, 1910	25 00	20 67
Severson, G. P. R.	Stavely.....	Horse, bay, about 900 pounds, branded W V, on right shoulder.....	July 1, 1909	Dec 15, 1909	Feb. 26, 1910	15 50	2 10
Darlow, G. H.	Alix.....	Steer, red, bob tail, right ear swallow tail, undercut left ear, corning 2 years old, branded L 4, connected, and lazy 2 with a bar connecting the bottom of the 2 to the bottom of the 4, on left shoulder.....	May 1, 1909	Oct. 31, 1909	June 26, 1910	85 00	78 25
"	"	Steer, roan, 2 years old, no marks	Jan. 28, 1910	Feb. 28, 1910	May 7, 1910	21 00	4 79
"	"	Heifer, red and white, both horns off, branded M 4, bar under, on right shoulder.....	Jan. 28, 1910	Feb. 28, 1910	May 7, 1910	21 00	4.87
"	"	Heifer, brindle, coming two years old, branded S H, bar over, on right ribs.....	Jan. 15, 1910	Feb. 28, 1910	May 7, 1910	15 00	.....
"	"	Gelding, bay, no brand visible.....	Jan 1910	Feb. 28, 1910	May 7, 1910	15 00	.....
Mundy, Jas.	Leduc.....	Gelding, bay, about 12 years old, weight about 1,000 pounds, branded inverted L H, on left shoulder, and U on right shoulder.....	Aug. 1909	Nov. 15, 1909	Jan. 25, 1910	53 00	37.20
"	"	Gelding, buckskin, about 9 years old, branded half circle, over circle, on right side, and inverted L H on left shoulder, weight about 900 pounds	Jan. 10, 1910	May 15, 1910	July 27, 1910	30 00	13.60
"	"	"	Jan. 10, 1910	May 15, 1910	July 27, 1910	30 00	13.60

Davies, Chas. A.....	Content.....	Two heifers, red, two years old, white faces, branded cross, half circle up over, on left ribs, also one calf	June 1909	Dec. 21, 1909	Mar. 5, 1910	32.00	....
Hodson, S. R.....	Okotoks..	Cow, red and white, branded reversed L, quarter circle down over, all followed by 11 in large size, on right ribs, calf following cow.	Nov. 1, 1909	Feb. 28, 1910	June 7, 1910	43.00	22.50
"	"	Cow, red, scrub horns, bob tail, little white on belly, about 5 years old, branded Q H J, 8 years old, no visible brand	Apr. 1, 1909	July 15, 1910	Sept. 28, 1910	36.00	24.25
Mohler, Wm.....	Strome..	Cow red, horns bent up, 8 years old, no visible brand	Nov. 1, 1909	Jan. 31, 1910	Mar. 31, 1910	14.00	3.45
"	"	Heifer calf, red and white spotted, no visible brand	Nov. 1, 1909	Jan. 31, 1910	Mar. 31, 1910	12.00	1.50
"	"	Cow and calf, cow roan, calf nearly the same colour as the cow, no brands visible.....	Nov. 1, 1909	Jan. 31, 1910	Mar. 31, 1910	18.00	6.05
Campbell, F	Ferry Point....	Mare, brown, star in forehead, hind feet white, sway backed, branded inverted U on left shoulder	July 1909	Nov. 15, 1909	Jan. 26, 1910	65.00	49.95
"	"	Heifer, two years old, red, white face, little white under belly, no visible brand	Dec. 25, 1909	Feb. 15, 1910	May 14, 1910	12.00	7.25
Wallace, J.....	Red Deer....	Cow, red, and white, branded indistinctly 3 with a bar running backward from the top and the bottom, on left ribs, also M on right hip	Nov. 15, 1909	Dec. 31, 1909	Mar. 9, 1910	11.00	....
"	"	Steer, red, roan, white face, 2 years old, no visible brand	Sept. 1, 1909	Apr. 15, 1910	July 16, 1910	20.00	13.40
Faulkner, A. E.....	Noelton.....	Steer, red, rising 3 years, no brand visible	Dec. 14, 1909	Dec. 31, 1909	Feb. 22, 1910	29.00	15.35
"	"	Cow, blue roan, short horns, branded N 9, on right ribs	Fall 1908	Jan. 31, 1910	Mar. 4, 1910	13.00	....
Hastings, H. I.	Hastings Coulee	Cow, roan, 6 years old, poor condition, branded reversed D, bar, on left ribs	Dec. 10, 1909	Jan. 15, 1910	Mar. 10, 1910	18.50	4.56
"	"	Steer, dark red, brockle faced, undercut from right ear, 3 years old, branded W inverted W, bar over to the right, on right ribs	Feb. 1, 1910	Feb. 28, 1910	Apr. 21, 1910	20.00	.....
Cook, Matthew.....	Lamerton.....	Mare, gray, low set, pony, weighs about 850 pounds, black mane and tail, branded lazy L II, half diamond up under, and N under half diamond, left shoulder, about 4 years old	Jan. 15, 1909	Mar. 15, 1910	Apr. 26, 1910	31.60	20.50
"	"	Mare, light bay, black mane and tail, small star in forehead, weighs about 900 pounds, small white spot on left hind foot, branded lazy L, H, half diamond up under, and N under half diamond, left shoulder, about 4 years old	Jan. 15, 1909	Mar. 15, 1910	Apr. 26, 1910	31.60	20.50
"	"	Gelding, black, pony, point of left ear split about half an inch, weighs 900 pounds, about 4 years old, branded lazy L, H, half diamond up under, and N under half diamond, left shoulder	Jan. 15, 1909	Mar. 15, 1910	Apr. 26, 1910	31.80	20.51
Canies, E. J	Clareholm ...	Heifer, bright red, with spreading horns, age about 3 years, no brand visible.....	Oct. 1, 1909	Dec. 15, 1909	Mar. 12, 1910	16.00	8.08
"	"	Heifer, red, 3 years old, branded R O, vertical bar under the O, on left ribs, indistinct brand on left hip	Jan. 15, 1910	Jan. 31, 1910	Apr. 9, 1910	30.00	19.73
"	"	Gelding, brown, branded ship's wheel, left thigh, blotched brand on left shoulder.....	Dec. 15, 1909	Feb. 15, 1910	Apr. 30, 1910	28.00	19.38
Richardson, S.A....	Bens Lake....	Steer, red, 4 years old, no brand visible	Dec. 1, 1909	Jan. 15, 1910	Apr. 1, 1910	40.00	24.60
Robinson, Jas.....	Josephsburg..	Heifer, red and white, no brand visible	Dec. 18, 1909	Dec. 31, 1909	Mar. 25, 1910	17.00	8.70
"	"	Heifer calf, black and white, both ears cropped, no visible brand..	June 19, 1910	July 31, 1910	Oct. 29, 1910	6.00	....
Faull, J. B.....	Twin Butte..	Steer, dark red, 5 or 6 years old, branded a figure resembling a pot with a flower in it, pot is shaped like a triangle and flower is curved to the right and left.....	Dec. 1909	June 15, 1910	Aug. 24, 1910	50.00	41.75

SALES OF ANIMALS UNDER THE STRAY ANIMALS ORDINANCE.—Continued.

Justice	Address	Class of Animal	Date of Capture	First Gazette Notice	Date of Sale	Proc'ds of Sale	Sent to Department
Caspell, E. W.	Cayley	Horse, mare, roan, about 800 pounds, 13 hands high, with foal at foot, branded round topped I half circle up over, bar T under quarter circle, on left shoulder.	Apr. 28, 1909	Feb. 15, 1910	Apr. 28, 1910	\$60 00	\$55 00
Bibby, Isaac.	Pine Creek.	Heifer, yearling, red and white, no visible brand.	Dec. 23, 1909	Jan. 15, 1910	May 27, 1910	9.50	.....
MacLeod, J. B.	Flagstaff.	Steer, yearling, red and white under belly, no visible brand, white spots on face and head.	Aug. 1, 1909	Jan. 15, 1910	Mar. 22, 1910	8.00	1.10
Short, J.	Horse Hills.	Heifer, red and white, two years old, about 600 pounds, one horn twisted, no visible brand.	Nov. 15, 1909	Feb. 28, 1910	Apr. 14, 1910	7.00	.....
Milligan, R.	Pine Lake.	Gelding, bay, branded lazy V with two bars under and a vertical bar following, on left hip, about 4 years old.	May 20, 1910	June 15, 1910	Sept. 10, 1910	40 00	29.95
Iddings, T. A.	Rimbey.	Heifer, brindle, black nose, slit in right eye.	Oct. 17, 1909	Mar. 31, 1910	July 4, 1910	11.00	.....
Moore, D. H.	Idlay.	Mare, gray, seven years old, heavy dark mane and tail, very dark gray, weight about 850 pounds, branded reversed inverted L followed by K on left shoulder, also 5 quarter circles joining, forming a figure resembling a star with a quarter circle down over, on left hip.	Mar. 1, 1910	Apr. 15, 1910	July 18, 1910	27 00	21.20
Morkeberg, D. J.	Markerville.	Mare, buckskin, age about 2 years, weight about 800 pounds, no visible brand.	Feb. 25, 1910	Mar. 15, 1910	May 31, 1910	37 00	25.67
Campbell, R. B.	Olds.	Steer, red and white, age about 3 years, branded 7 Y, bar under.	Dec. 10, 1909	Dec. 15, 1909	Apr. 9, 1910	40 00	22.60
"	"	Steer, face white, yellow ear, branded an indescribable brand on right, with a half diamond down over, colour roan.	Dec. 10, 1909	Feb. 15, 1910	Apr. 16, 1910	17 00	.52
"	"	Heifer, red and white, white face, stub horns, rising two years old, no visible brand.	Jan. 5, 1910	Jan. 31, 1910	Apr. 21, 1910	12 00	.....
"	"	Gelding, buckskin, 14 years old, dark mane and tail, branded L on left thigh.	Jan. 15, 1910	Feb. 15, 1910	May 30, 1910	85 00	63.58
"	"	Heifer, red, two years old, branded reversed L 6, bar over, on right ribs.	Jan. 15, 1910	Feb. 15, 1910	May 30, 1910	15.75	.....
"	"	Gelding, bay, white star, right hind foot white, weight about 1,000 pounds, 15 hands high, 6 years old, no visible brand.	June 1, 1909	Mar. 31, 1910	June 14, 1910	99 00	86.60
"	"	Mare, bay, 4 years old, branded an indescribable brand on right shoulder, rather low down.	Jan. 1, 1910	Feb. 15, 1910	June 16, 1910	35 00	14.13
"	"	Steer, red, small undercut from left ear, white on face, tip of tail white, no visible brand.	June 1, 1907	Apr. 30, 1910	July 14, 1910	39 00	28.55
"	"	Cow, white, cow black, some white on face, 3 years old, no visible brand; calf black, one year old, no visible brand.	Feb. 1, 1909	May 15, 1910	Aug. 27, 1910	35.25	22.05
Struthers, R. H.	Bassano.	Pony gelding, brown, about 14 hands, 3 white feet, about 8 years old, branded on right shoulder, N O H below, and a hanging W to the H.	Feb. 1909	Aug. 31, 1909	Jan. 7, 1910	25 00	18 10
Pineo, D. B.	Rimbey.	Two-year-old heifer, red and a two-year-old steer; heifer red and white, steer red, white spot in face.	Nov. 15, 1907	Nov. 15, 1909	Feb. 8, 1910	42 00	19 50
Moorhouse, O.	Strathmore.	Two bay geldings, aged, no brands visible.	June 10, 1909	July 15, 1909	Sept. 25, 1909	105 00	99 88

Morgan, R. W.	Pincher Station.	Two cows and one calf, one cow red, age about 4 years, branded dumbell on left ribs, same on left thigh, calf at foot; one roan cow, both ears cropped and wattle on the nose, has blotted brand on left ribs.	Dec. 20, 1909 Aug. 1, 1909	Jan. 31, 1910 Nov. 30, 1909	Apr. 8, 1910 Feb. 1, 1910	20 00 15 00	10.43 1.35
Clements, Wm. Fletcher, R. W.	Vegreville. Burdett.	Heifer, red.	Aug. 1909	Jan. 31, 1910	May 14, 1910	127 50	119 70
Holmes, John.	Cardston.	Gelding, bay, weight 1,250 pounds, few gray hairs on forehead, bunch or growth on left knee, branded small inverted hairpin on left withers, C B, half circle under bar through, on left shoulder.	Mar. 15, 1908 Feb. 18, 1910 Feb. 18, 1910 Feb. 18, 1910 July 1908 Dec. 2, 1909	Mar. 31, 1908 Mar. 15, 1910 Mar. 15, 1910 Feb. 28, 1910 Nov. 30, 1909 Mar. 15, 1910	Feb. 12, 1910 June 11, 1910 June 11, 1910 June 11, 1910 Feb. 8, 1910 May 14, 1910	10 00 24 00 73 00 202 52 15 00	5 51 19 85 67 55 202 52 1.03
Rattray, J. T.	Killam.	Horse, bay, white strip on nose, both hind feet white, about 12 years old, brand on right shoulder, lame on both front feet.	Sept. 20, 1909	Dec. 15, 1909	Feb. 25, 1910	15 50	2 05
"	"	Horse, white, about 12 years old, branded triangle on left shoulder.	Jan. 15, 1910	Mar. 30, 1910	June 30, 1910	102 00	87 95
"	"	Horse, bay, two years old, branded 41 on left shoulder.	June 1909	June 30, 1909	Mar. 12, 1910	73 00	57 96
"	"	Two sorrel mares, and one two-year-old gelding, branded O 7 on right shoulder.	Nov. 15, 1909	Dec. 15, 1909	Mar. 5, 1910	29 00	12 85
"	"	Steer, two years old, red and white, no horns, no visible brand.	Oct. 1909	Dec. 31, 1909	Mar. 28, 1910	15 00	2 06
"	"	Cow, muley, red and white, both hind feet white, age 8 to 10 years, no visible brand.	Oct. 1908	Jan. 15, 1910	Mar. 22, 1910	40 00	23 88
"	"	Two cayuse mares; one bay mare, branded on left ribs N C, other brown mare, white face, branded M, quarter circle up over on left thigh.	Oct. 10, 1909	Mar. 15, 1910	May 12, 1910	45 00	34 31
"	"	Horse, sorrel, 4 years old, branded upper half diamond, left shoulder.	Dec. 1909	Mar. 31, 1910	June 15, 1910	35 00	17 81
"	"	Steer, red, two years old, no brand visible.	Dec. 1909	Mar. 31, 1910	June 18, 1910	15 00	3 46
"	"	Gelding, gray, aged, pony, about 800 pounds, branded inverted U on right shoulder.	Apr. 15, 1909	Nov. 15, 1909	Feb. 24, 1910	55 00	29 22
"	"	Steer, dark red, 4 years old, branded 11 K or 11 R, on left hip.	Aug. 1, 1909	Dec. 15, 1909	Apr. 2, 1910	134 00	125 35
"	"	Steer, red, branded reversed J N, half diamond down under, followed by 1 R, left ribs.	Dec. 22, 1909	Dec. 31, 1909	Mar. 12, 1910	15 00	.55
"	"	Cow, spotted black and white, 4 years old, wattle, branded a lazy E and 8 on right side, a muley, yearling heifer, no white belly, white head, no visible brand.	Nov. 12, 1909	Jan. 31, 1910	Mar. 21, 1910	15 00	2 27 1
"	"	Heifer, black, long horns, small, two or three years old, no visible brand.	Nov. 26, 1909	Feb. 15, 1910	Apr. 16, 1910	21 00	3 46
"	"	Mare, gray, aged, wild, about 1,000 pounds, branded U vented bar over on left hip, U right half circle, V O N, script T under the N on left shoulder; bay mare, coming 3 years, about 900 pounds, no visible brand.	Oct.	Feb. 15, 1910	Apr. 25, 1910	15 40	4 37
"	"	Horse, 3 or 4 years old, 1,100 pounds, barb wire scar on left front foot, branded L, monogram T and L, on right jaw.	Dec.	Feb. 15, 1910	Apr. 25, 1910	30 83	8 73 1
"	"	Heifer, red, polled, no brand visible.	Dec.	Feb. 15, 1910	Apr. 25, 1910	30 83	8 73 1
"	"	Steer, red, rising 3 years old, white underline, white spot on right thigh, no visible brand.	Dec.	Feb. 15, 1910	Apr. 25, 1910	30 83	8 73 1
"	"	Cow, roan, both ears cropped, short horns inclined to tip down, bob tail, branded B 2 P, on right ribs.	Dec.	Feb. 15, 1910	Apr. 25, 1910	30 83	8 73 1
"	"	One heifer, red, rising 3 years.	Dec.	Feb. 15, 1910	Apr. 25, 1910	30 83	8 73 1
"	"	Steer, red, muley, white spots on forehead and body; heifer, red, rising two years, short tail, end of right ear off, no visible brands on any.	Dec.	Feb. 15, 1910	Apr. 25, 1910	30 83	8 73 1
Morrison, J. H. Stormont, J. J.	Bentley. Duxbury	Heifer, red, rising 3 years old, white underline, white spot on right thigh, no visible brand.	Apr. 15, 1909	Nov. 15, 1909	Feb. 24, 1910	55 00	29 22
"	"	Horse, 3 or 4 years old, 1,100 pounds, barb wire scar on left front foot, branded L, monogram T and L, on right jaw.	Aug. 1, 1909	Dec. 15, 1909	Apr. 2, 1910	134 00	125 35
"	"	Heifer, red, polled, no brand visible.	Dec. 22, 1909	Dec. 31, 1909	Mar. 12, 1910	15 00	.55
"	"	Steer, red, rising 3 years old, white underline, white spot on right thigh, no visible brand.	Nov. 12, 1909	Jan. 31, 1910	Mar. 21, 1910	15 00	2 27 1
"	"	Cow, roan, both ears cropped, short horns inclined to tip down, bob tail, branded B 2 P, on right ribs.	Nov. 26, 1909	Feb. 15, 1910	Apr. 16, 1910	21 00	3 46
"	"	One heifer, red, rising 3 years.	Oct.	Feb. 15, 1910	Apr. 25, 1910	15 40	4 37
"	"	Steer, red, muley, white spots on forehead and body; heifer, red, rising two years, short tail, end of right ear off, no visible brands on any.	Dec.	Feb. 15, 1910	Apr. 25, 1910	30 83	8 73 1

DEPARTMENT OF AGRICULTURE

SALES OF ANIMALS UNDER THE STRAY ANIMALS ORDINANCE.—Continued.

JUSTICE	ADDRESS	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Procs'ds of Sale	Sent to Department
Stormont, J. J.	Duxbury	Horse, buckskin, white hind feet, white stripe in forehead, about 8 years old, about 850 pounds, no visible brand.	Apr. 5, 1910	Apr. 15, 1910	June 15, 1910	\$52.00	\$40.00
Carruthers, N.	Lacombe	Gelding, sorrel, aged, weight 850 pounds, branded a three tined spear pointing up, left shoulder	July 19, 1909	Nov. 30, 1909	Mar. 22, 1910	41.00	34.25
"	"	Mare, black, aged, 850 pounds, branded hairpin, right jaw	July 19, 1909	Nov. 30, 1909	Mar. 22, 1910	42.00	37.95
Whiteside, F. H.	Castor	Heifer, grade, red, little white on belly, has horns, about 2 years old, no visible brand	Dec. 15, 1909	Feb. 15, 1910	May 14, 1910	14.00	.....
Sheppard, H. N.	High River	Steer, white face, long horns, left ear cropped, white on legs, blotched brand looks like harpin, lazy T on left hip	Dec. 9, 1909	Dec. 31, 1909	Apr. 12, 1910	25.00	10.65
Smith, J. C.	Trochu	Mare, cayuse, bay, 4 years old, no visible brand	Dec. 12, 1907	Dec. 31, 1909	Apr. 19, 1910	57.00	46.38
		Heifer, red, 2 years old, blotched brand on right side and shoulder	Dec. 5, 1909	Feb. 15, 1910	Apr. 19, 1910	16.00	4.40
		Steer, red roan, 3 years old, branded a lazy T, 9, monogram, bar under, on left shoulder	Dec. 15, 1909	Feb. 15, 1910	Apr. 19, 1910	32.50	20.45
Barker, E. N.	Cardston	Gelding, light bay, slightly dark points, chunky and heavy set, weight about 1,100 pounds, age about 5 years, branded monogram inverted N K, on right shoulder	Apr. 1909	July 15, 1909	May 4, 1910	70.00	63.40
Putland, C. A.	Bentley	Cow, red, 4 years old, slits in both ears, no brand visible	Apr. 1909	Dec. 31, 1909	May 7, 1910	19.00	3.30
"	"	Steer, red and white, about one year old, no visible brand	Mar. 25, 1910	Apr. 30, 1910	June 21, 1910	14.00	8.80
Chatham, P.	Halkirk	Cow, red, little white on brisket, tips of both ears frozen off, stub horns, about 6 years old, no visible brand	Mar. 25, 1910	Apr. 30, 1910	June 21, 1910	25.00	19.75
"	"	Mare, bay, 6 years old, white blaze on face, one white hind foot, no visible brand	Oct. 1909	Mar. 31, 1910	May 10, 1910	80.00	57.25
"	"	Filly, bay, hind feet white, white spot on forehead, one year old, no visible brand	Oct. 1909	Mar. 31, 1910	May 10, 1910	65.00	42.62
	"	Mare, brown, 7 or 8 years old, white spot on forehead, branded circle with three hooks from it, lazy J with C connected to the left bottom corner, on left shoulder	Oct. 1909	Mar. 31, 1910	May 10, 1910	60.00	37.75
Olesburg, O. E.	Bawlf	One roan steer, coming three years, no visible brand	Oct. 1, 1908	Dec. 31, 1909	Mar. 9, 1910	33.00	18.75
Johnson, C. J.	Edberg	Steer, roan, two years old, branded lower half circle on right hip	Oct. 1, 1909	Dec. 31, 1909	May 7, 1910	20.00	6.45
"	"	Heifer, red, two years old, right ear under-notched, branded 6 K, J, on left hip	Oct. 1909	Mar. 31, 1910	May 7, 1910	17.50	4.01
	"	Steer, light roan, about 2 years old, bob tail, tips of ears red, and point off right horn, no visible brand	Jan. 1, 1910	Feb. 15, 1910	June 14, 1910	17.00	1.03
Thompson, C. S.	Big Valley	Yeastling steer, red, a few white spots, no visible brand	Feb. 1910	Feb. 15, 1910	May 14, 1910	15.25	.53
	"	Gelding, black, white strip on face, hind feet white, weight about 700 pounds, age 8 years, branded N lower half circle under, on left side	1908	Feb. 15, 1910	May 14, 1910	18.50	1.96
Caesley, A.	Caesleyville	Cow, red, little belly, white spot on face, little white on hind legs, half P on right shoulder	Feb. 1, 1910	Feb. 28, 1910	May 9, 1910	22.00	4.65
Hallberg, E. R.	Chipman	lay P on right shoulder	Sept. 29, 1909	Mar. 31, 1910	May 23, 1910	13.00	.....
Brooks, M. W.	Rosenroll	Steer, dark bundle, no visible brand	Oct. 1909	Feb. 28, 1910	June 8, 1910	20.00	1.60
	"	Steer, Jersey, poor, mulley, red and white, about 2 years old, no visible brand	Oct. 1909	Feb. 28, 1910	June 8, 1910	20.00	1.60

Brooks, M. W.	Rosenroll	Buckskin mare, castrate about 10 years old, with dark stripe down back, left hind foot white, white star in forehead, branded by line on right hip, S half diamond up, on right jaw. One mare buckskin colt, 4 white feet, no visible brand.	Oct. 1908	June 30, 1910	Sept. 29, 1910	48.00	34.15
Fetherston, T. W.	Nanton	Cow, three years old, red, no visible brand, young calf at foot.	Feb. 14, 1910	Feb. 28, 1910	June 3, 1910	24.00	11.20
Martin, J. W.	Viking	Mare, Clydesdale breed, dark bay or brown, white stripe in face, weight about 1,200 pounds, age 3 or 4 years, left hind foot white, no visible brand.	May 1910	July 31, 1910	Nov. 7, 1910	170.00	159.32
"	"	Mare, black, weight about 1,250 pounds, lame on right front foot, branded two dots representing a colon and what looks like a running L and a hanging X, very indistinct, on right side of neck.	June 15, 1910	Aug. 15, 1910	Oct. 29, 1910	36.00	29.08
Ingram, C. E.	Sundial	Sorrel pony mare, three white legs, white face, about 600 pounds weight, branded J lazy E, right thigh.	Mar. 22, 1910	June 30, 1910	Aug. 22, 1910	15.00	12.52
Sproule, O. B.	Orbindale	Cow, roan, small horns, no visible brand.	Nov. 1909	Feb. 28, 1910	Sept. 3, 1910	21.00	11.46
McNaughton, Jas.	Carmangay	Cow and calf, red and white, mulley, two slits on outside at end of right ear, no visible brand.	Jan. 1910	June 15, 1910	Sept. 10, 1910	25.50	16.08
"	"	Cow, dark red, gentle, about 6 years old, no visible brand, calf at foot.	Jan. 1910	June 15, 1910	Sept. 10, 1910	30.00	20.46
"	"	Cow, brindle, light red and white, gentle, milk cow, full ears, five years old, no visible brand, calf at foot.	Jan. 1910	June 15, 1910	Sept. 10, 1910	36.00	26.28
Booth, A.	Amisk	Gelding, bay, about 9 years old, weight about 1,100 pounds, big hoof on left front foot, from wire cut, is lame from same.	May 9, 1910	May 31, 1910	Sept. 12, 1910	65.00	59.90
"	"	branded B, bar under, 4 under bar, and bar under 4.	June 20, 1910	July 15, 1910	Oct. 12, 1910	68.00	62.10
Bernard, F. W.	Trochu	Pinto gelding, 5 or 6 years old, one black eye, one white one, dark tail, white mane, branded W C on left shoulder.	Sept. 12, 1907	Feb. 15, 1910	Oct. 6, 1910	22.00	6.36
"	"	Cow, pure white, branded 3 S, bar under, on right ribs, H U, V under, on right hip, reversed G 3, bar on left ribs, and Y 2 K on right hip.	Dec. 15, 1909	Feb. 15, 1910	Oct. 6, 1910	12.00	.....
"	"	Heifer, roan, white on belly, rising two years old, white head, red spot on forehead, white strip on back, frozen ears, no visible brand.	May 20, 1910	Sept. 15, 1910	Nov. 10, 1910	8.75	.....
Powell, F. J.	Edwell	Gelding, sorrel, about 22 years old, branded G U, on right hip.	June 15, 1909	Sept. 30, 1909	Mar. 12, 1910	31.50	16.30
Barber, F. H.	Vermilion	Pony, pinto, white and cream, small, no visible brand, sex gelding.	End May, 1910	July 30, 1910	Nov. 7, 1910	170.00	159.32
Martin, J. W.	Viking	Mare, dark bay or brown, with white stripe in face, weight about 1,200 pounds, 3 or 4 years old, white on left hind foot, no brand visible.	June 15, 1910	Aug. 15, 1910	Oct. 29, 1910	36.00	29.08
"	"	Mare, black, about 1,250 pounds, white ring around hind feet, and badly lamed on off fore leg from wire cut, branded a running L and hanging X, on right side of neck.	Jan. 1910	Apr. 30, 1910	Nov. 29, 1910	38.00	27.85
Fetherston, T. W.	Nanton	Small pony, gelding, sorrel, 7 years old, weight about 650 pounds, wire on left front leg, branded H K on right shoulder.	June 15, 1910	Aug. 15, 1910	Oct. 29, 1910	36.00	29.08
Ingram, C. E.	Sundial	Cow, light red, white legs, chest and belly, white spot on top of shoulder, horns with tips cut off, two inches cut off of right ear, branded a figure resembling a crown, lying on its side, or a reversed 3, circle connected, on left ribs, bar under left hip.	Jan. 1910	Apr. 30, 1910	Nov. 29, 1910	38.00	27.85
"	"	Calf, red and white, male, no brand visible.	Aug. 16, 1910	Sept. 15, 1910	Dec. 2, 1910	25.00	18.82
"	"		Aug. 16, 1910	Sept. 15, 1910	Dec. 2, 1910	16.00	11.65

SALES OF ANIMALS UNDER THE STRAY ANIMALS ORDINANCE.—Continued.

JUSTICE	ADDRESS	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Procd's of Sale	Sent to Department
George, F. W. B....	Macleod...	Gelding, dark bay, with white on forehead, about 10 years of age, branded E H bar under, on right flank, and wineglass with vent, on jaw.....	Oct. 1, 1909	July 15, 1910	Sept. 26, 1910	\$17.00	\$13.00
Tweed, J. G.....	Cochrane.....	Gelding, pony, chestnut, white face, both hind feet and right front foot white, little white on left front coronet, aged, broken to saddle, branded S quarter circle up over, K under the S, on left shoulder, and S quarter circle up over, on left thigh.....	Sept. 20, 1910	Oct. 15, 1910	Dec. 10, 1910	29.00	18.00
"	"	Mare, gray, pony, branded inverted S bar over, on left thigh, unbranded yearling following her.....	June 15, 1910	July 31, 1910	Dec. 24, 1910	75.00	64.40
Campbell, R. B.....	Olds.....	Horse, dark brown, aged, weight about 1,200 pounds, has shoes on, branded P bar under connected to the bottom of the P, and a half circle around the top of the P, on left shoulder, indistinct brand on right shoulder.....	July 1, 1910	Sept. 15, 1910	Nov. 30, 1910	50.00	40.00
Plunkett, G. D.....	Pincher Creek...	Gelding, brown, branded F half circle up over, on left shoulder, also gelding, between a roan and a buckskin, branded 36 with circle under, on right shoulder.....	Mar. 1, 1910	May 15, 1910	Aug. 23, 1910	31.00	22.25
Thorne, W. B.....	H.....	Gelding, bay, small white stripe on forehead, about 8 years old, broken to saddle, lame on fore foot, branded a flying E with P over, on left thigh, and C monogram J F with a small U under the J F, on right shoulder, is badly blotched with marks through.....	Dec. 1909	June 15, 1910	Dec. 14, 1910	24.00	12.70
Worsley, G. S.....	Edmonton....	Gelding, bay, dark mane and tail, black from knees down, 4 years old, no brands visible.....	Oct. 22, 1909	July 31, 1910	Oct. 2, 1910	79.00	71.63
Downie, Simon.....	Carstairs.....	Pony, mare, gray, about 3 years old, no brand visible.....	July 1, 1910	July 15, 1910	Nov. 26, 1910	71.00	60.16
"	"	old, branded an eye used on a lady's dress, it also resembles the handle of a pail, with a bar through it, on left hip, and V on right rump.....					
Layton, S. J.....	Taber.....	Gelding, sorrel, bald face, age about 9 years, weight about 900 pounds, left ear split, branded quarter circle up over reversed E over bar, followed by lazy J connected to top of L, on left thigh.....	July 1, 1910	July 15, 1910	Nov. 26, 1910	11.00	1.69
Turner, J. W. Lang.....	Union Lake...	Mare, pinto, sorrel, about 4 years old, no brand visible.....	Feb. 2, 1910	Feb. 28, 1910	Dec. 2, 1910	42.00	37.50
			June 28, 1910	Aug. 31, 1910	Dec. 1, 1910	55.00	46.20

ENTIRE ANIMALS.

The provisions of The Entire Animals Ordinance prohibits the owner of any stallion over one year of age from allowing his horse to run at large in any part of the province at any time. When these stallions are found running at large they may be captured, advertised in two consecutive issues of the Official Gazette, the same as estrays, and sold within twenty days after the first notice has been published. The provisions of the Ordinance also prohibit the owners of bulls that are over nine months of age from permitting such bulls to run at large in the province, with the exception of those parts which have been set aside as bull districts, under clause 2 of section 4 of the Ordinance. This clause makes provision whereby the Minister of Agriculture can, by publication in the Official Gazette, proclaim certain districts as bull districts. In such districts bulls may run at large between the 1st of July and the 31st day of December, without being captured. When a bull is captured he is advertised and sold the same as a stallion.

The following is a list of the bull districts created up to December 31st, 1910:

District No. 1.—All that part of the province lying south of township 34.

District No. 2.—All that part of the province north of township 33, and east of range 11, west of the fourth meridian.

District No. 3.—Townships 51, 52 and 53 in range 17, west of the fourth meridian.

District No. 4.—Township 34 in ranges 2 and 3, west of the fifth meridian.

District No. 5.—That part of the province bounded on the north by township 42, on the east by range 10, on the south by township 33, and on the west by the Red Deer River, as far as township 36, to a point where the river crosses at range 22, then by range 22 as far north as township 42, with the exception of township 41, ranges 20 and 21, west of the fourth meridian.

From January 1st, 1910, to December 31st, 1910, there were 55 stray bulls and 26 stray stallions advertised in the Official Gazette; of this number 11 bulls and 4 stallions were sold. There were, also, 2 stray boars advertised in the Official Gazette, neither of which were sold.

The balance of the proceeds of the sales of these animals is held in trust in the same manner as under The Stray Animals Ordinance.

The following is a list of the sales conducted during the year:

SALES OF ANIMALS UNDER THE ENTIRE ANIMALS ORDINANCE, 1910.

JUSTICE	ADDRESS	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Procs'ds of Sale	Sent to Department
Campbell, Wm.	Holden..	Bull, roan, branded 5 D quarter circle on right hip	Dec. 18, 1909	Jan. 15, 1910	Feb. 5, 1910	\$30.50	\$14.00
Anderson, P. B.	Bardo..	Bull, yearling, red, white stripe along back, no visible brand	Nov.	July 31, 1910	Oct. 10, 1910	11.00	3.90
Hodson, S. R.	Okotoks..	Stallion, bay, two years old, with small star in forehead, right hind foot white, no visible brand	Feb. 18, 1910	Feb. 28, 1910	Apr. 1, 1910	22.00	2.50
"	"	Bull, red, 18 months old, following a cow branded L X under quarter circle down, all followed L in large star on right ribs	Feb. 15, 1910	Feb. 28, 1910	Apr. 1, 1910	11.00	
Pitthouse, H. G.	New Sarepta.	Bull, red, with brown head, about 10 months old, no visible brand	Nov. 10, 1909	Feb. 15, 1910	Mar. 30, 1910	5.00	
Robinson, Jas.	Josephsburg..	Bull, red, white head, white line on back, white belly, no visible brand	Apr. 1906	Nov. 30, 1909	Feb. 26, 1910	20.00	9.98
McLeod, J. B.	Flagstaff	Bull, red, has horns, are about 3 years, no visible brand	Sept. 10, 1909	Jan. 15, 1910	Mar. 1, 1910	18.00	8.65
Fletcher, R. W.	Burdett.....	Bull, red, two years old, white face, branded W on left ribs	Nov. 20, 1909	Dec. 15, 1909	Feb. 3, 1910	20.00	
Conneff, C. G.	Cumings..	Stallion, bay, about 3 years old, no visible brand	Feb. 26, 1910	Mar. 31, 1910	Apr. 28, 1910	30.00	13.85
Walsh, J. J.	Cumings..	Bull, Hereford grade, dark red, white face, white feet, white under-lip, no visible brand	Jan. 1, 1910	Jan. 31, 1910	Mar. 11, 1910	14.00	.72
Sheppard, H. N.	High River..	Bull, roan, white face, 3 years old, branded four small imperfect circles connected by four bars to form a square, together with four short bars connected to and projecting from the four circles on right shoulder, brand is badly put on	Sept. 6, 1910	Sept. 15, 1910	Oct. 22, 1910	15.00	
Lambert, E. W. R.	Strathmore.....	Bull, black, mulley, no visible brand	Jan. 2, 1910	Feb. 15, 1910	Apr. 2, 1910	22.00	3.25
Towne, A. W.	Hayesville..	Bull, red and white, rope on neck, no visible brand	Sept. 3, 1909	Feb. 15, 1910	May 14, 1910	39.75	
Thompson, A.	Wavy Lake..	Bull, red, and white, aged, delormed, indistinct brand or scar on left hip	May 21, 1910	May 31, 1910	July 5, 1910	15.00	
Martin, J. W.	Viking.....	Stallion, black, two white hind feet, disfigured brand, left shoulder, weight about 500 pounds	May 27, 1910	July 15, 1910	Aug 27, 1910	27.00	
Biddell, P. J.	Cowley..	Stallion, bay, three years old, left hind foot white, barbed wire cut on left front foot, about 750 pounds.	Dec. 18, 1910	Dec. 31, 1910	Jan. 28, 1911	25.00	8.80

POUND DISTRICTS.

A larger number of applications for the organization of pound districts have been made this year than in any previous year. In a number of cases it was not found advisable to grant the request of the applicants; and owing to the scarcity of pasture in some portions of the province, it was very difficult to enforce the provisions of the Ordinance.

In addition to the above districts, a number of village and municipal pounds were constituted.

The following is a list of the districts now organized under the Ordinance:

No. 1.—Township 7, range 20, sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17 and 18. Township 7, range 21, sections 1, 2, 3, 10, 11, 12, 13, 14 and 15. Township 6, range 20, sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 27, 28, 29, 30, 31, 32, 33 and 34. Township 6, range 21, sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 21, 22, 23, 24, 25, 26, 27, 28, 33, 34, 35 and 36. Township 5, range 20, sections 1 to 36 inclusive. Township 5, range 21, east half.

No. 2.—Township 55, range 26, sections 6, 7, 18, 19, 30 and 31. Township 56, range 26, sections 6, 7 and 18. Township 54, range 27, sections 31, 32, 33, 34, 35 and 36, north of the Sturgeon River. Township 55, range 27, sections 1 to 36 inclusive. Township 56, range 27, fractional sections 1, 12 and 13.

No. 3.—Township 55, range 26, sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12, and the south half of sections 13, 14, 15, 16 and 17. Township 54, range 26, north halves of sections 31, 32, 33, 34 and 35.

No. 4.—Township 3, range 24, sections 21, 22, 23, 24, 25, 26, 27, 28, 33, 34 and 35. Township 4, range 24, sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 16, 21, 22, 23, 24, 25, 26, 27, 28, 33, 34, 35 and 36. Township 5, range 24, all that part south of the St. Mary River. Township 5, range 23, sections 1, 2, 3, 4, 5, 6, 11 and 12, and that portion of sections 7, 8, 9 and 10 south of the St. Mary River. Township 4, range 23, sections 22, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35 and 36.

No. 5.—Township 30, range 4, sections 1 to 24 inclusive.

No. 6.—Township 47, ranges 13 and 14. Township 48, ranges 13 and 14.

No. 7.—Township 51, range 24, sections 5, 6, 7, 8, 17 and 18.

No. 8.—Township 50, range 24.

No. 9.—Township 53, range 22.

No. 10.—Townships 12 and 13, ranges 21 and 22.

No. 11.—Township 20, ranges 25 and 26.

No. 12.—Township 16, range 29, sections 13, 14, 15, 16, 17, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 32, 33, 34 and 36.

No. 13.—Township 11, range 20.

No. 14.—Township 19, range 27.

No. 15.—Township 21, range 27.

No. 16.—Townships 14 and 15, range 22.

No. 17.—Townships 13, 14 and 15, range 19, and township 15, range 20.

No. 18.—Townships 14, 15 and 16, range 18.

No. 19.—Township 8, range 19.

No. 20.—Township 16, range 28.

No. 21.—Township 11, range 23, west of the 4th meridian.

No. 22.—All of township 21, range 27, west of the 4th meridian.

No. 23.—All of townships 13, 14 and 15, ranges 19 and 20, all west of the fourth meridian.

No. 24.—All of township 19, range 27, west of the fourth meridian.

No. 25.—All of township 13, range 26, township 13, range 27, township 14, range 26, township 14, range 27, township 14, range 28, all west of the 4th meridian.

No. 26.—Township 10, range 20, sections 27, 28, 29, 30, 31, 32, 33 and 34, west of the 4th meridian.

No. 27.—All of township 2, range 13, west of the 4th meridian.

No. 28.—All of township 11, range 20, west of the 4th meridian.

No. 29.—All of township 33, range 17, west of the 4th meridian.

No. 30.—All of township 14, range 28, west of the 4th meridian.

No. 31.—West half of township 5, range 21, and township 5, range 22, west of the 4th meridian.

No. 32.—All of township 8, range 14, west of the 4th meridian.

No. 33.—All of township 17, range 28, west of the 4th meridian.

No. 34.—All of sections 19 to 36, township 8, range 20, west of the 4th meridian.

No. 35.—All of sections 1 to 24, township 9, range 20, west of the 4th meridian.

No. 36.—All of sections 4, 5, 6, 7, 8, 9, 16, 17, 18, township 9, range 19, west of the 4th meridian.

No. 37.—Township 10, ranges 22 and 23, west of the 4th meridian.

No. 38.—Township 56, range 2, west of the 5th meridian.

Poundkeepers Appointed.

No. 1.—J. O. Wood, of Beaumont; the pound to be kept on the north-east quarter of section 14, township 50, range 24, west of the 4th meridian.

No. 2.—Wm. Birdsall, of Brant; the pound to be kept on the south-east quarter of section 28, township 19, range 26, west of the 4th meridian.

No. 3.—Thomas Mayes, of Nestor; the pound to be kept on the south-east quarter of section 10, township 48, range 14, west of the 4th meridian.

No. 4.—L. G. Marks, of Rosemead; the pound to be kept on the south-east quarter of section 28, township 14, range 19, west of the 4th meridian.

No. 5.—E. A. Kellerman, of Sundial; the pound to be kept on the north-east quarter of section 16, township 13, range 19, west of the 4th meridian.

No. 6.—John Denton Kuykendall, of Sweet Valley; the pound to be kept on the south-east quarter of section 9, township 15, range 19, west of the 4th meridian.

No. 7.—Jas. Rodeback, of Raymond; the pound to be kept on the south-east quarter of section 8, township 6, range 20, west of the 4th meridian.

No. 8.—A. E. Rodgers, of Stavely; the pound to be kept on the south-east quarter of section 26, township 14, range 28, west of the 4th meridian.

No. 9.—George Thomson, of Magrath; the pound to be kept on section 26, township 5, range 22, west of the 4th meridian.

No. 10.—Samuel Noble, of Iron Springs; the pound to be kept on the south-east quarter of section 14, township 11, range 20, west of the 4th meridian.

No. 11.—A. M. Wynn, of Stavely; the pound to be kept on the north-east quarter of section 20, township 14, range 26, west of the 4th meridian.

No. 12.—Andrew W. Orr, of Dinton, the pound to be kept on section 28, township 20, range 26, west of the 4th meridian.

No. 13.—P. Larson, of Nanton; the pound to be kept on the west half of section 21, township 16, range 28, west of the 4th meridian.

No. 14.—M. W. Skelton, of Wheat Centre; the pound to be kept on the south-west quarter of section 35, township 15, range 18, west of the 4th meridian.

No. 15.—H. W. Byers, of Taber; the pound to be kept on the south-east quarter of section 30, township 8, range 14, west of the 4th meridian.

No. 16.—W. H. Pawson, Jr., of Coaldale; the pound to be kept on the north-west quarter of section 1, township 9, range 20, west of the 4th meridian.

During the year there were 100 animals impounded; of this number 14 animals were sold. The following table gives a description of these:

SALES OF ANIMALS UNDER THE POUND DISTRICT ORDINANCE, 1910

POUNDKEEPER	ADDRESS	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Procd's of Sale	Sent to Department
Kuykendall, John.....	Sweet Valley...	Bay mare and colt, strip in face, spot on nose, left hind foot white, wire cut, branded E6, right thigh, 12, right belly, weight, 1,100 pounds. One brown filly, star on forehead, left hind foot white, branded round topped T, half circle up over, on left shoulder, weight 700 pounds.	June 6, 1910 Sept. 21, 1910	June 30, 1910 Oct. 15, 1910	July 13, 1910 Oct. 29, 1910	\$131.00 18.50	\$82.92 20
Mahaffey, O. H.....	Tofield.....	Cow, brindle, lame on right hind leg, no brand visible.	July 15, 1910	Aug. 15, 1910	Aug. 25, 1910	20.00	5 90
Kemp, C. J.....	Crescent Heights....	Filly, bay, white on hind fetlock, one year old, branded R 7 connected, on right shoulder.	Feb. 26, 1910	Apr. 15, 1910	May 4, 1910	22.00	.....
Crookston, D.....	Magrath.....	Cow, brindle, aged, stub horned, little calf at foot, branded inverted Y vented, half diamond up over, left ribs.	Apr. 17, 1910	May 15, 1910	June 27, 1910	31.00	.....
Bushfield, S. J.....	Airdrie.....	Horse, sorrel, about 10 years old, white on face, little lame on right front foot, branded lazy J and E monogram, left neck, circle, bar inside of circle, on right shoulder, bar, connected, looks something like a sickle, on left thigh.	Mar. 17, 1910	Apr. 15, 1910	Apr. 17, 1910	137.00	116 30
Low, Jas. P.....	Cardston.....	Horse, sorrel, white face, 1,100 pounds, 4 or 5 years old, no visible brand.	Apr. 7, 1910	Apr. 30, 1910	May 18, 1910	22.00	9.35
Birdsall, W. E.....	Dinton.....	Steer, spotted, two years old, branded reversed inverted L, followed by N, half diamond up over, on left ribs.	July 30, 1910	Aug. 15, 1910	Oct. 5, 1910	15.00	1.30
Root, A. T.....	Bowville.....	Steer, yearling, red and white, white face, branded L L vertical bar attached to the first L, half circle up under the bar, on right hip.	June 3, 1910	July 15, 1910	Aug. 27, 1910	110.00	93.73
"	"	Mare, bay, about 6 years old, weight about 1,000 pounds, branded rowlock monogram, one upright and the other inverted, attached to the one stem, giving it the shape of a nut wrench, on left thigh.	June 3, 1910	July 15, 1910	Aug. 27, 1910	112.00	95.68
"	"	Mare, sorrel, age about 10 years old, weight about 1,100 pounds, branded water pitcher on right shoulder.	June 11, 1910	July 15, 1910	Aug. 27, 1910	35.00	17.32
"	"	Pony mare, roan, colt at side, branded T, script E R below, on left shoulder.	June 3, 1910	July 15, 1910	Aug. 27, 1910	32.00	17.32
"	"	Mare, bay, weight about 1,000 pounds, about 10 years old, branded lazy S, bar over and below, on left thigh, and S U or V, on left neck.	June 3, 1910	July 15, 1910	Aug. 27, 1910	32.00	17.32

HERD DISTRICTS.

Under the provisions of The Herd District Ordinance seven herd districts were organized during the year.

The following districts have now been constituted under the provisions of the Ordinance:

Range 1, townships 29, 50, 51, 52 and that portion of township 53 lying south of the North Saskatchewan River.

Range 2, townships 49, 50, 51, 52, 53 and that portion of township 54 lying south of the North Saskatchewan River.

Range 3, townships 51, 52, 53 and those portions of townships 54 and 55 lying south of the North Saskatchewan River.

Range 1, townships 47 and 48.

Range 3, townships 49 and 50.

Range 4, townships 50 and 51.

Ranges 1 and 2, townships 38, 39 and 40.

Ranges 3 and 4, townships 38, 39 and 40.

Range 1, townships 47 and 48.

Range 4, township 54.

Range 2, township 47.

Range 2, township 48.

Range 4, township 49.

Ranges 1 and 2, township 41.

Range 3, township 47.

The following townships were added during the year:

Ranges 1, 2 and 3, townships 37.

Range 5, township 48.

Range 4, township 52.

Range 3, township 47.

Range 2, township 47.

Ranges 1 and 2, township 41.

Range 2, township 48.

All west of the fourth meridian.

Poundkeepers Appointed in Herd Districts During the Year.

Ernest A. Fitch, of Rivercourse; pound kept on south-east quarter of section 14-47-1w4.

R. J. Robinson, of McLoughlin; pound kept on the south-east quarter of section 20-46-1w4.

C. W. Lewis, of Hindville; pound kept on the south-west quarter of section 23-48-5w4.

R. Bowen, of Kitcoty; pound kept on the south-west quarter of section 14-49-4w4.

A. Swan, of Islay; pound kept on the north-east quarter of section 10-52-4w4.

No animals were sold during the past year under The Herd District Ordinance.

STOCK INSPECTION.

During the year stock inspectors were appointed at a number of new points which have developed sufficient importance as stock shipping centres to demand attention. Besides this, there were a number of changes in the personnel of the inspectors already appointed. All inspectors were asked to appoint deputy inspectors under the provisions of the Ordinance so that in the absence of the inspector there would be someone to act at all times and the shipper not detained when making a shipment. The assistance given in previous years to the Western Stock Growers' Association, in maintaining a competent stock inspector at Winnipeg to inspect all

shipments from Alberta was continued. As the result of this work 30 animals were detected as having been improperly shipped. The Secretary of the Association located the owners as far as he could, forwarding money received for each animal properly identified. The list and descriptions of the animals unlocated, together with the balance of the money, he forwarded to the Department to be advertised in the Official Gazette. A number of those so advertised have been claimed and the money paid over to the owners. The balance of the proceeds will be placed in the general trust account from where it may be claimed during a period of twelve months, after which it passes into the general revenue of the province.

DEPARTMENT OF AGRICULTURE

Stock Statistics for Alberta. Calculated from returns received up to December 31st, 1910.

SHIPPING POINTS	INSPECTORS	EXPORTS				LOCAL SHIPMENTS		TOTAL	
		EAST		WEST		CATTLE	HORSES	CATTLE	HORSES
		CATTLE	HORSES	CATTLE	HORSES				
Aerne.....	J. D. Witwer.....	663	1	47	...	1,480	34	2,190	35
Airdrie.....	W. A. H. Downie.....	457	2	271	1	876	194	1,604	197
Aldersyde.....	Wm. B. Way.....	...	...	...	14	...	15	...	29
Alix.....	Horace Hickling.....	313	258	790	2	322	78	1,425	338
Bassano.....	W. S. Playfair.....	...	36	...	...	...	35	...	...
Bawlf.....	K. O. Eggen.....	624	23	...	...	995	41	1,619	64
Blackfalds.....	Joseph Capron.....	4	30	52	9	27	48	83	87
Bowden.....	P. McDermott.....	155	...	147	5	102	42	404	47
Bow Island.....	H. E. Beattie.....	...	...	...	24	...	29	...	53
Brooks.....	James Gregory.....	6,450	233	...	20	323	205	6,803	458
Bruce.....	James Waldie.....	...	...	...	...	...	14	...	14
Calgary.....	P. D. Sanders.....	6,743	577	14,565	620	2,431	4,485	23,739	5,682
Camrose.....	W. G. Duggan.....	514	10	26	4	1,732	139	2,272	153
Cardston.....	Frank Austin.....	4,838	102	27	9	647	211	5,512	322
Carstairs.....	Robert Scott.....	1,946	105	1,344	2	1,325	258	4,615	365
Castor.....	Henry Knight.....	661	16	...	...	41	21	702	37
Cayley.....	L. Beaton.....	...	...	...	...	144	24	144	24
Chigwell.....	H. Christiansen.....	...	...	...	...	...	2	...	2
Chipman.....	Andrew Watson.....	110	7	...	...	1,647	1	1,757	8
Clareholm.....	C. W. James.....	1,962	45	1,425	164	595	736	3,982	945
Cochrane.....	A. R. McKay.....	1,835	78	1,199	33	671	61	3,705	172
Coutts.....	Wm. T. Patton.....	4,014	18	...	...	458	244	4,472	262
Cowley.....	P. J. Biddell.....	288	8	204	69	...	41	723	118
Crossfield.....	Wm. Urquhart.....	643	14	845	13	1,398	189	2,886	216
Crowfoot.....	Charles Rodburn.....	...	...	...	...	...	...	...	...
Czar.....	Chas. Houcher.....	761	...	...	...	...	...	761	...
Daysland.....	D. Davidson.....	1,224	4	...	...	1,486	49	2,710	53
Didsbury.....	H. B. Atkins.....	591	197	1,442	5	2,608	184	4,641	386

Edberg.....	W. F. Wendt.....	182	653	103	11	423	475	708	1,139
Edmonton.....	J. H. Pickering (V.S.).....	2,330	5	463	19	621	7	3,414	31
Erskine.....	Oliver Gibbon.....								
Fort Saskatchewan	John Graf.....								
Gleichen.....	Thomas Henderson..	1,583	792	170	64	1,777	805	3,530	1,661
Granum.....	Neil Nicholson.....	557	1	32	24	44	130	557	55
Grassy Lake	Wm. Salvage.....	684				386	11	760	131
Greenshields..	Chas. F. Gibson.....					178	982	386	18
Hardisty.....	Arthur Wood.....	212	7	2,981	278	161	358	390	1,479
High River.....	Chas. E. Fisk.....	3,797	219	821	8	3,059	3	8,648	
Holden.....	A. E. Stewart.....	492	65			364	17	653	
Innisfail.....	W. T. Lundy.....	167				164	20	4,047	431
Innisfree.....	A. A. Loftus.....	327	1			15	58	691	3
Irricana.....	Wm. Dennis.....					83	4	164	1
Irvine.....	Carl Beny.....	269	61			37	20	284	78
Islay.....	D. H. Moore.....	191				2	52	274	2
Killam.....	J. H. Caldwell.....					2,523	625	37	4
Kitscoty.....	Stewart F. Campbell..	50				702	12	52	20
Lacombe.....	Jas. P. Kent.....	475	262	479	9		12	3,477	896
Lamont.....	F. C. Smith.....	30					1025	732	
Lavoy.....	Fred Pass.....	44	4				58	44	20
Leduc.....	J. S. Johnson.....	37		159	5	680	1	876	63
Lethbridge.....	C. W. Lowther.....	3,244	481	307	155	1,167	1,025	4,718	1,661
Lloydminster..	Hiram Millar.....	303					68	303	1
Magrath.....	Benj. Matkin.....	1,932		44	83	23	445	1,999	151
Macleod.....	R. G. Mathews.....	1,301	521	22	75	1,649	5	2,972	1,041
Mannville.....	Walter Shuh.....	521				84	519	605	5
Medicine Hat..	J. H. G. Bray.....	5,419	2,097	24	93	43	29	5,486	2,709
Millet.....	Alex. Minard.....	24	6	13	6	113		150	41
Minburn.....	E. Huffman.....								
Morinville.....	Nick Hittinger.....					446	30	446	30
Morley.....	T. H. Graham.....			19	7	207	40	228	47
Morningside ..	W. C. Huston.....					18	24	18	24
Mundare.....	Valantine Mohr.....	451	6			889	13	1,340	19
Nanton.....	Peter McElroy.....	32	83	261	151	1,715	486	2,008	720
New Norway.....	Norman M. Smith.....								
Ohaton.....	A. W. Fleming.....			36	7	383		419	7

STOCK STATISTICS FOR ALBERTA. Calculated from returns received up to December 31st, 1910.—Continued.

SHIPPING POINTS	INSPECTORS	EXPORTS				LOCAL SHIPMENTS		TOTAL	
		EAST		WEST		CATTLE	HORSES	CATTLE	HORSES
		CATTLE	HORSES	CATTLE	HORSES				
Okotoks.....	Geo. C. S. Paterson	1,396	181	92	16	330	391	1,818	588
Olds.....	Thos. McKercher.....	2,461	45	244	29	1,303	103	4,008	177
Penhold.....	J. M. Hart.....	138	7	21	8	398	20	557	35
Pincher Creek.....	Jas. Robertson.....	688	224	2,305	234	1,327	204	4,320	662
Ponoka.....	A. Reid.....	2,111	27	2,032	2	1,992	162	6,135	191
Ranfurly.....	Albert Labelle.....	..	..	..	..	..	..	..	..
Raymond.....	T. J. O'Brien.....	825	22	33	32	469	3	1,327	57
Red Deer.....	F. L. Cottle.....	470	124	652	51	2,102	368	3,224	543
Round Hill.....	Wm. Ross.....	..	..	..	..	..	..	..	..
Ryley.....	Livingston Bolton.....	73	..	..	..	167	..	240	..
Sadgewick.....	John Burn.....	119	..	..	6	152	27	271	33
Stavely.....	J. B. Robertson.....	65	1	32	10	93	91	190	102
St. Albert.....	J. A. Piquette.....	..	..	..	..	..	..	..	..
Stettler.....	Jay C. Blain.....	7,104	177	986	128	3,331	225	11,421	530
Stony Plain.....	J. R. Graham.....	..	..	..	..	17	1	17	1
Strathcona.....	R. Wainwright.....	9	70	93	48	243	932	345	1,050
Strathmore.....	Oscar Moorehouse.....	5,312	71	2,389	32	2,329	363	10,030	466
Strome.....	W. T. Phipps.....	967	23	..	..	255	24	1,222	47
Taber.....	Neil Neilson.....	..	1	16	4	19	3	35	8
Tees.....	Wm. E. Tees.....	330	..	239	8	556	27	1,145	35
Tofield.....	R. A. McKenzie.....	52	..	..	..	495	12	547	12
Vegreville.....	M. G. Connolly.....	564	52	21	..	2,408	29	2,993	81
Vermilion.....	H. Woods.....	303	119	..	..	649	56	952	175
Viking.....	Otto O. Lund.....	290	..	..	..	49	1	339	1
Walsby.....	Lachlan Sinclair.....	1,853	146	23	2	125	59	2,001	207
Wetaskiwin.....	P. A. Miquelon.....	758	46	399	7	2,812	207	3,969	260
Total.....	Total.....	85,388	8,364	37,895	2,610	60,986	16,913	184,269	27,887

WOLF BOUNTY.

In last year's report attention was called to the fact that owing to the appropriation made by the Legislature for the destruction of wolves becoming exhausted, the payment of bounty on prairie wolves, *i.e.*, coyotes, was discontinued. It was not continued during 1910. A few warrants were received for prairie wolves that had been issued previous to July 31st, 1909, the date on which inspectors were instructed to cease issuing warrants for prairie wolves.

The present bounty apparently prevents the increase of timber wolves. Judging, however, from warrants received no pups are being taken in the northern part of the province. It would appear that the grown wolf is more valuable from a commercial standpoint than the pup, consequently trappers and others do not wish to destroy the pups, as when grown they can obtain five to six dollars for the pelt in addition to the bounty of ten dollars. It is a question, therefore, whether or not the regulations should be altered so as to encourage the taking of bitches and pups during the spring and summer.

The bounty on timber wolves was continued during 1910, as in previous years. The total amount paid for the destruction of these pests during the year was \$3,005.30, representing 282 grown wolves and pups, also warrants for certain prairie wolves issued previous to July 31st, 1909. The amount of bounty claimed was equally distributed between the north and south, that is, the amount claimed north of the 55th parallel was equal to the amount claimed south of township 30. Practically no bounty was asked for between township 30 and the 55th parallel other than for pelts taken north or south of the lines referred to.

II.—CROPS.

WEATHER CONDITIONS AND STATISTICS.

The supervision of the voluntary meteorological service in the province started by the Territorial Department has been continued under the direction of the Dominion meteorological office at Toronto. During the year a number of new observers were appointed and the following is a complete list of all stations in operation in 1910:

METEOROLOGICAL STATIONS IN THE PROVINCE OF ALBERTA, 1910.

SHOWING THE LATITUDE, LONGITUDE, ALTITUDE AND NAME OF EACH OBSERVER.

STATION	Latitude	Longitude	Altitude	OBSERVER
Alix.....	52 24	113 10	....	E. H. Curtis.
Athabasca Landing..	54 43	113 17	1650	Sam Hayes.
Banff.....	51 10	115 34	4542	L. B. Sanson.
Bon Accord.....	53 53	113 24	....	John Schofield.
Calgary.....	51 2	114 12	3389	Miss M. Bradin.
Cardston.....	49 12	113 18	....	M. Woolf.
Daysland.....	55 52	112 17	....	D. Davidson.
Didsbury.....	51 40	114 8	3300	C. S. Peterson.
Dunvegan.....	55 56	118 35	1305	F. I. Bedson.
Eckville.....	52 23	114 22	3000	W. W. Caskarth.
Halkirk.....	52 15	112 12	....	Mrs. W. L. Fulton.
Edmonton.....	53 33	113 30	2158	Campbell Young.
Fort Vermilion.....	55 27	116 3	....	Rev. A. S. White.
Fort Vermilion.....	....	....	....	Robt. Jones.
Fort McMurray.....	....	....	....	Miss Gordon.
Gleichen.....	50 59	112 54	2952	F. H. Blackbourne.
Gilt Edge.....	52 59	110 43	....	Fred Ellis.
High River.....	50 35	113 53	3394	L. M. Robertson.
Hilldown.....	52 14	113 29	2806	R. E. Fiske.
Harmattan.....	51 45	114 23	3500	W. Levesley.
Islay.....	52 24	110 32	....	J. R. Giles.
Knee Hills.....	51 31	113 22	3100	A. Wyndham.
Loveland.....	....	....	....	Otto Richler.
Lethbridge.....	49 42	112 51	2961	C. B. Bowman.
Lunnford.....	54 33	114 19	....	G. F. Lewhall.
Lethbridge Exp. Farm....	49 43	112 51	....	W. H. Fairfield.
Lacombe Experimental F'm	52 28	113 44	2783	R. E. Everest.
Lawrence.....	50 16	113 26	3350	L. D. Meachan.
Macleod Police.....	49 44	113 24	3128	Sergeant Haslitt.
Peace River Crossing....	56 15	117 15	....	H. A. George.
Medicine Hat.....	50 1	110 37	2161	Walter Crosskill.
Pembina.....	....	....	....	D. H. Telfer.
Pakan.....	54 0	112 31	....	C. A. Mitchell.
Pincher Creek.....	49 0	114 4	3750	G. W. Gill.
Three Hills Creek.....	51 30	113 11	....	W. E. Cutler.
Spirit River.....	55 40	118 47	....	A. M. Josse.
Wetaskiwin.....	52 58	113 23	2480	J. H. Walker.
Waitefield.....	53 29	111 38	2000	Thos. B. Waite.

OBSERVERS WHO REPORT ON RAINFALL, THUNDER AND SNOWFALL.

Station	Observer
Bardo.....	J. N. Jevning.
Bismark.....	Henry Nagel.
Brooks.....	I. Wilde.
Bruderheim.....	C. A. Albrecht.
Bittern Lake.....	E. C. Roper.
Campsie.....	Wm. Wallace.
Conjuring Creek.....	J. A. Sangster.
Coutts.....	Sergeant Oliver.
Dorelee.....	C. Nixon.
Elkwater.....	G. W. Smiberet.
Josephsburg.....	James Robinson.
Jumping Pond.....	L. J. G. Ward.
Lacombe Experimental Farm	Miss A. M. Crow.
Langdon.....	C.P.R. Irrigation Co.
Loch Sloy.....	Hugh MacFarlane.
Macleod.....	J. Stenson.
Okotoks.....	H. R. Harper.
Ponoka.....	John Hagemann.
Sion.....	Geo. H. Cottman.
Wabamun.....	J. C. Haddock.

MONTHLY WEATHER REVIEW, 1910.

January.

EDMONTON.—A month of very mild weather. Stock reported to be in good condition; 77 hours of bright sunshine.

MEDICINE HAT.—The weather continued fine and mild throughout January. Very light snowfall, remaining on the ground nearly the whole of the month, greatly favouring the stock ranges.

February.

EDMONTON.—A month of fairly fine weather with very low temperatures during the latter part. Stock reported in good condition; 154 hours of sunshine.

MEDICINE HAT.—Fine, generally, during February; one week severe weather; range stock in fine shape, not affected by cold spell.

March.

EDMONTON.—A month of fine weather with the highest mean temperature ever recorded here. The snow disappeared early in the month and the warm weather has advanced the plowing and seeding throughout the district. Stock has wintered well; 180 hours of bright sunshine.

MEDICINE HAT.—Exceptionally fine weather prevailed during March, with some quite high temperatures. Plowing and early spring work is now being pushed on rapidly.

April.

EDMONTON.—A month of fine weather; unusually warm during the greater part of the month. Prairie fires have occurred over a considerable extent of the country. Early season has advanced farming operations and seeding is practically completed. Hours of bright sunshine, 192.

MEDICINE HAT.—Unusually warm and dry during April with a few light showers; spring seeding finished; more rain needed to start growth.

May.

EDMONTON.—A month of fine weather, very dry during the first half but much needed precipitation during the latter half has put crop prospects in a most favourable position over the district; 242 hours of bright sunshine.

MEDICINE HAT.—The weather was warm and dry during May, outlying districts, however, report much better rains and that the crops are looking very well.

June.

EDMONTON.—A month of fine, warm weather, with showers at regular intervals, and heavy rains towards the end of the month, has placed the crop in this district in a most satisfactory condition; 289 hours of bright sunshine.

MEDICINE HAT.—Warm, dry weather during June. Grass lands and crops have suffered to some extent for want of moisture. Rainfall scanty.

July.

EDMONTON.—A month of fine weather with showers at regular intervals. Crops looking good all over this district; 276 hours of bright sunshine.

August.

EDMONTON.—A month of considerable cloudy weather, rain falling on fourteen days, which has somewhat retarded harvesting operations; crops promise a good yield over most of the districts; there were 223 hours of bright sunshine.

MEDICINE HAT.—Much cooler weather during August. Good rainfall, which has been of great advantage to winter feed. Stock shipments are heavy.

September.

EDMONTON.—A month of considerable cloudy weather with frequent rains which interfered materially with harvesting work; 186 hours of bright sunshine.

MEDICINE HAT.—The weather was fine but much cooler during September; no frost; winter feed curing nicely; crop rather light; stock shipments continue brisk.

October.

EDMONTON.—A month with considerable cloudy weather and light precipitation. Threshing has been general during the last few weeks and good yield reported. Stock throughout the district is in good condition; 130 hours of bright sunshine.

MEDICINE HAT.—Fine and mild weather during October. Occasional frosty nights with warm days. Stock reports show range cattle to be in fine condition.

November.

EDMONTON.—A month of very cloudy weather with frequent light falls of snow. 44.7 hours of bright sunshine. Stock doing well all over district.

December.

EDMONTON.—A month with considerable cloudy weather, moderately cold for first week, followed by very mild weather for two weeks, closing with cold weather and snow during the last few days. Stock in good condition throughout the country; 80 hours of bright sunshine.



A MODERN ALBERTA THRESHING OUTFIT.

ANNUAL PRECIPITATION FROM 1897 TO 1910, INCLUSIVE.

STATION	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	Average
Alix.	...	...	...	...	...	...	...	...	*2.87	13.00	*13.91	14.15	14.39	*10.29	...
Athabasca Landing	...	...	...	...	...	...	...	...	*11.69	*0.45	...	...	*6.29	*16.49	8.71
Banff.	23.40	20.58	26.34	23.29	19.27	30.59	24.82	14.80	16.00	14.88	23.54	21.05	21.56	16.32	21.17
Bantry	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bardo.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bismark.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Blainmore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Brooks.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bruderheim.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bittern Lake	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bon Accord.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Calgary.	16.05	20.53	14.94	26.15	17.57	22.31	34.57	22.77	14.84	16.24	14.96	18.25	16.03	...	18.81
Cardston.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Campsie.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Conjuring Creek.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Coutts.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Daysland.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Didsbury.	...	...	...	...	23.07	25.13	21.80	14.26	21.72	22.07	...	...	...	...	...
Dunvegan.	...	...	...	...	...	...	...	...	...	14.49	...	...	...	...	...
Dorence.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eckville.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Elkwater.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Edmonton.	...	...	...	27.82	27.53	20.66	21.06	19.86	15.36	...	...	...	...	...	...
Fort Vermilion.	14.55	10.90	20.89	...	...	...	...	...	...	*13.48	16.62	17.89	14.30	14.43	18.24
Fort McMurray	...	...	...	...	...	...	...	...	...	*8.23	*3.19	*3.57	*9.55	*1.69	5.25
Gleichen.	...	...	...	...	...	...	15.83	*10.22	11.19	16.61	...	...	...	...	...
Gilt Edge.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Grassy Lake.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Halkirk.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
High River.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hillsdown.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	16.26	16.06	17.51	*18.64	18.16	21.25	17.98

ANNUAL PRECIPITATION FROM 1897 TO 1910 INCLUSIVE.—Continued.

STATION	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	Average
Harmattan.....												*14.76	*7.11	*12.09	11.32
Islay.....												*.68	5.89	*0.00	.....
Josephsburg.....											11.56	*9.54	*13.78	*0.00	.....
Jumping Pond.....											16.09	20.14	16.88	12.80	16.48
Knee Hill.....										*11.18	*5.30	*10.19	.....	*0.00	.....
Loveland.....														*35.70	.....
Lethbridge.....						28.13	14.82	11.40	13.78	*22.48	15.50	16.16	11.69	*5.66	15.51
Lethbridge Exp. Farm.												*13.97	10.36	*7.41	.....
Lacombe.....									15.04			*17.66	15.34	13.04	15.27
Lacombe Exp. Farm.											*18.52	*15.33	8.01	13.28	.....
Lawrence.....											12.19	*14.69	11.69	9.66	.....
Lunnford.....														*14.37	.....
Langdon.....													10.98	*8.41	.....
Loch Sloy.....														*7.45	.....
Macleod.....	12.69	13.59	19.74	10.08	12.21	10.48	9.73	5.34	11.63	20.82	*12.40	*18.11	*16.05	*8.57	12.96
Macleod Police											*19.48	*11.49	14.88	*8.17	.....
Medicine Hat.....	17.27	15.91	*22.28	22.05	20.80	13.68	9.90	9.70	8.99	11.62	*6.96	*9.67	9.80	*6.45	13.22
Okotoks.....											*12.93	19.01	13.52	*10.86	.....
Peace River Crossing											*2.81	*12.33	*9.05	*10.98	8.79
Pembina.....												12.22	4.02	*6.89	.....
Pakan.....											*18.32	*27.31	13.91	*23.06	19.69
Pincher Creek.....									14.52	*21.63		*6.82	25.91	*10.82	15.94
Ponoka.....											*19.53	17.87	*10.04	*14.61	15.51
Spirit River.....														*7.34	.....
Ston.....											17.11	17.98	20.69	*19.79	.....
Three Hills Creek							18.53	11.44	18.02	15.25	*13.77	14.29	15.74	*8.49	14.44
Wetaskiwin.....							20.87	18.10	13.18	16.64	17.97	17.97	13.94	*17.00	17.00
Waitefield.....										24.57	17.07	22.87	17.83	13.83	19.23
Wabamun.....											20.36	19.97	*7.67	*0.00	12.00

*Report covers only part of year.

MONTHLY PRECIPITATION FOR 1910.

STATION	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Alix.....	0.62	0.25	0.20	0.33	1.45	4.05	1.98	2.11	1.85	0.17	0.72	0.52	*10.29
Athabasca Landing.....	..	..	0.03	0.39	1.12	3.03	4.82	..	..	1.41	0.70	1.03	*16.49
Bismark.....	..	0.50	0.33	1.67	1.67	3.87	1.19	3.25	..	..	0.41	0.43	*11.68
Bruderheim.....	0.60	0.60	0.30	0.27	1.43	3.93	2.17	1.61	1.63	0.82	..	0.80	*13.56
Bittern Lake.....	..	..	0.22	0.01	1.37	3.05	0.95	4.55	1.93	0.22	0.60	0.90	*13.80
Banff.....	0.46	1.94	1.59	1.19	0.63	2.77	0.46	2.97	1.06	1.36	0.99	0.90	16.32
Brooks.....	..	..	..	0.35	0.27	0.55	0.47	1.86	1.79	0.72	0.62	0.37	*6.90
Bantry.....	..	..	..	..	..	0.11	..	..	..	..	..	..	*0.11
Bardo.....	0.05	..	0.32	0.10	0.07	2.44	1.84	2.43	2.03	0.56	0.30	0.35	*10.49
Blairmore.....	..	..	..	..	..	..	..	1.25	2.64	2.21	0.32	0.12	*6.54
Calgary.....	0.21	0.88	1.12	0.30	1.08	1.54	0.44	3.97	1.50	0.48	0.34	0.17	12.03
Campsie.....	..	..	..	..	..	2.92	4.05	3.07	2.16	0.83	..	0.99	*14.02
Cardston.....	..	1.30	0.40	0.80	2.05	1.25	0.19	1.02	4.65	0.24	0.80	0.50	*13.20
Coutts.....	..	..	..	0.01	1.00	0.42	0.25	..	0.02	..	0.40	..	*2.10
Conjuring Creek.....	..	..	..	..	..	..	2.43	..	..	..	0.37	0.87	*4.05
Didsbury.....	0.30	0.50	0.70	..	1.20	4.19	1.95	5.25	1.84	0.38	0.70	0.40	*17.48
Daysland.....	..	..	..	..	..	3.75	0.71	4.35	..	1.35	0.15	..	*10.31
Dorenee.....	0.20	0.40	0.10	0.10	0.73	..	1.35	..	0.92	0.70	0.60	..	*5.10
Dunvegan.....	0.37	0.20	..	..	2.80	2.26	1.15	..	..	0.67	..	..	*7.45
Edmonton.....	0.16	0.46	0.77	0.38	1.20	2.22	2.25	2.87	2.01	0.51	0.67	0.93	14.43
Elkwater.....	..	..	..	..	0.44	1.15	1.53	1.76	2.42	..	..	..	*7.30
Ekville.....	..	..	..	..	..	..	..	..	1.20	0.18	0.30	0.20	*1.88
Gleichen.....	..	0.90	..	..	0.55	1.15	..	2.48	2.73	1.15	0.15	0.30	*9.41
Gilt Edge.....	0.37	0.14	0.20	..	..	1.19	2.83	1.69	1.50	1.14	0.32	0.60	*8.88
Grassy Lake.....	0.30	0.62	..	0.25	0.08	0.10	0.50	0.50	1.05	1.00	0.25	0.50	*5.15
Harnatton.....	0.32	..	0.70	0.12	0.70	2.01	1.07	3.83	2.09	0.58	0.35	0.32	*12.09
High River.....	0.77	0.65	0.37	0.20	0.71	0.83	0.26	1.84	2.55	0.35	0.30	0.50	9.33
Halkirk.....	0.19	0.41	..	0.20	0.32	1.92	1.75	3.64	1.61	..	..	..	*10.04
Hillsdown.....	0.80	0.45	0.77	0.22	2.38	4.29	1.90	6.53	2.35	0.16	0.82	0.58	21.25
Jumping Pond.....	0.48	0.80	0.87	0.64	0.41	3.24	0.28	3.78	1.42	0.49	0.23	0.16	12.80

MONTHLY PRECIPITATION FOR 1916.—Continued.

STATION	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Lacombe.....	0.70	0.15	0.50	0.03	1.38	4.59	1.11	2.75	1.20	0.08	0.45	0.10	13.04
Lawrence.....	0.70	0.90	0.06	0.24	0.58	0.38	0.14	1.86	3.04	0.26	0.70	0.80	9.66
Langdon.....	0.73	0.70	0.52	0.04	0.80	1.20	0.32	2.63	1.50	0.42	0.42	0.36	*8.41
Lacombe Exp. Farm	0.24	0.74	0.33	0.04	1.53	3.87	1.35	2.61	1.00	0.27	0.51	0.30	13.28
Lethbridge Exp. Farm	0.24	0.83	0.17	0.28	0.79	3.58	0.09	1.07	...	0.59	0.41	2.94	*7.41
Lunnford.....	...	0.12	0.57	0.71	1.10	3.58	3.32	3.80	...	0.59	0.45	0.72	*14.37
Loveland.....	...	...	...	...	2.63	7.07	5.55	15.70	3.11	0.34	0.80	0.50	*35.70
Loch Sloy.....	...	...	...	...	0.74	1.31	0.31	2.85	2.24	...	...	...	*7.45
Lethbridge.....	0.08	0.80	0.10	0.32	0.73	0.69	0.08	0.78	1.18	0.63	0.43	0.84	*5.66
Macleod.....	0.45	0.72	0.15	0.51	0.16	0.10	0.15	1.18	3.10	0.92	1.13	...	*8.57
Macleod Police..	0.37	1.72	0.16	0.16	0.99	0.78	1.63	1.04	1.34	0.03	0.98	0.60	*8.17
Medicine Hat...	0.29	0.45	0.02	0.20	0.49	0.29	0.31	2.24	0.54	0.30	...	...	*6.45
Okotoks.....	0.60	0.75	0.50	0.16	0.63	...	0.31	3.39	3.38	0.55	0.17	0.42	*10.86
Pakan.....	0.12	0.72	0.47	0.35	1.24	3.03	4.62	9.75	1.31	...	0.75	0.70	*23.06
Pembina.....	...	...	...	0.54	1.06	...	0.96	1.71	1.64	0.68	...	0.30	*6.89
Pincher Creek	0.28	0.58	...	0.40	2.55	0.65	0.20	1.86	3.87	0.43	...	...	*10.82
Peace River Landing	1.17	0.08	0.70	0.50	1.54	1.98	1.70	1.24	1.15	0.27	0.65	...	*10.98
Ponoka.....	0.36	0.40	0.20	0.06	1.01	1.81	1.61	4.84	2.87	...	0.75	0.70	*14.61
Sion.....	0.30	...	0.88	1.35	...	3.09	4.96	3.33	1.95	1.16	1.10	1.67	*19.79
Spirit River.....	0.55	0.16	0.40	0.01	1.12	2.33	1.73	1.04	...	...	...	...	*7.34
Three Hills Creek	0.19	0.52	...	0.07	0.55	1.36	1.73	1.79	1.27	0.24	0.49	0.28	*8.49
Wetaskiwin.....	0.30	0.61	0.19	...	1.18	4.16	2.60	4.50	2.59	...	0.48	0.79	*17.40
Waitefield.....	0.98	0.55	0.37	0.14	0.86	2.79	2.46	1.82	1.93	0.86	0.29	0.78	13.83
Fort Vermilion	...	...	...	...	...	...	0.84	0.85	...	...	...	...	*1.69

*Reports cover only part of the year.

MAXIMUM AND MINIMUM TEMPERATURES FOR METEOROLOGICAL STATIONS IN ALBERTA FOR 1910.

STATIONS	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Alix	45 0 -25 0	44 0 -52 0	61 0 -10 0	81 0 14 0	81 0 19 0	88 0 31 0	82 0 38 0	79 0 34 0	76 0 27 0	73 0 12 0	46 0 -11 0	49 0 -21 0
Athabasca Landing	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.
Banff	43 9 -35 0	32 0 -26 5	53 0 5 7	75 4 12 9	75 6 18 3	77 0 29 3	85 0 33 9	76 4 28 4	77 4 21 6	62 5 7 7	44 5 -8 0	45 0 -30 0
Blairmore	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.
Calgary	50 0 -16 0	49 0 -32 0	67 0 10 0	84 0 20 0	80 0 18 0	87 0 30 0	92 0 35 0	84 0 30 0	80 0 18 0	76 0 12 0	55 0 11 0	53 0 -13 0
Cardston	42 0 -15 0	44 0 -37 0	70 0 12 0	87 0 16 0	81 0 25 0	89 0 30 0	96 0 34 0	86 0 30 0	83 0 15 0	72 0 12 0	60 0 -12 0	60 0 -25 0
Daysland	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.	Maximum. Minimum.
Didsbury	54 0 -24 0	52 0 -30 0	68 0 12 0	86 0 22 0	84 0 18 0	90 0 32 0	90 0 38 0	80 0 30 0	80 0 22 0	80 0 14 0	60 0 4 0	58 0 -22 0
Dunvegan	36 0 -30 0	34 0 -36 0	.....	79 5 16 5	81 0 16 0	83 0 26 0	83 5 37 0	83 0 25 0	80 0 20 0	64 5 13 5	39 0 -20 0	46 0 -30 5
Eckville	46 0 -27 7	42 0 -45 0	67 0 -15 4	.....	.....	.....	.....	.....	78 0 14 2	78 0 3 2	42 0 -7 0	45 0 -22 0
Edmonton	44 0 -18 0	43 0 -39 0	68 0 -21 0	83 0 13 0	81 0 14 0	94 0 30 0	87 0 38 0	83 0 33 0	82 0 25 0	78 0 19 0	44 0 -8 0	49 0 -23 0

MAXIMUM AND MINIMUM TEMPERATURES FOR METEOROLOGICAL STATIONS IN ALBERTA FOR 1910.—Continued.

STATIONS.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Fort Vermilion... { Maximum... { Minimum... ..	50 0 -25 2	36 5 -25 2	54 8 -35 8	62 2 17 0	84 8 20 0	.....	83 0 40 0	86 1 28 2	77 5 22 0	56 0 8 2	30 0 -18 8	.....
Gleichen..... { Maximum... { Minimum... ..		42 0 -25 0	69 0 9 0	87 5 20 0	83 5 19 0	92 0 30 0	98 0 34 0	88 0 32 5	79 0 25 0	75 0 11 0	50 0 2 0	48 0 -16 0
Gilt Edge..... { Maximum... { Minimum... ..	33 0 -21 8	26 6 -36 0	61 6 -15 6	82 0 20 0	80 0 24 0	86 0 30 0	97 8 40 2	81 6 32 4	78 8 24 6	68 4 14 2	37 4 -7 4	40 4 -32 4
High River..... { Maximum... { Minimum... ..	48 0 -22 0	42 0 -37 5	68 5 11 0	85 5 15 5	80 5 15 0	88 0 30 0	95 5 27 0	86 0 27 0	79 5 19 0	77 0 14 0	57 0 8 0	59 5 -14 0
Halkirk..... { Maximum... { Minimum... ..	38 0 -20 0	37 0 -35 0	65 0 -4 0	85 0 20 0	84 0 17 0	92 0 28 0	91 0 37 0	88 0 33 0	79 0 24 0	72 0 10 0	38 0 -7 0	53 0 -24 0
Hilldown..... { Maximum... { Minimum... ..	49 3 -14 0	43 0 -33 0	64 3 -4 0	83 0 18 0	82 0 22 0	89 0 30 0	85 0 40 0	80 5 33 0	76 0 27 3	75 0 14 0	44 0 -3 0	53 0 -24 0
Harmattan..... { Maximum... { Minimum... ..	50 0 -26 0	52 0 -43 0	66 0 -4 0	80 0 13 0	78 0 10 0	83 0 25 0	86 0 28 0	81 0 27 0	79 0 15 0	76 0 3 0	59 0 -7 0	60 0 -25 0
Loveland..... { Maximum... { Minimum... ..					83 0	93 0 19 0	88 0 33 0	85 0 32 5	79 0 26 0	77 0 13 0	48 0 -7 0	63 0 -20 0
Lunnford..... { Maximum... { Minimum... ..		42 5 -44 2	67 2 -24 0	80 2 14 4	84 0 12 2	81 0 26 0	81 0 33 0	83 0 29 0	80 0 17 0	71 0 8 0	44 0 19 0	46 0 -25 0
Lacombe Experimental Farm... { Maximum... { Minimum... ..	46 9 -24 1	41 1 -38 0	65 6 -5 4	81 8 16 7	81 5 13 8	89 9 26 8	85 1 32 4	82 8 31 9	80 3 19 5	77 0 7 0	43 4 -2 6	47 8 -22 1
Lawrence..... { Maximum... { Minimum... ..		44 0 -48 0	66 0 71 0	90 0 13 0	82 0 12 0	92 0 25 0	100 0 22 0	85 0 26 0	75 0 25 0	75 0 15 0	50 0 8 0	58 0 -15 0

STATIONS.		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Lethbridge.	 { Maximum. Minimum	59.8 -9.2	46.6 -28.5	74.0 16.0	93.0 22.2	87.0 23.3	94.8 32.0	102.8 39.0	91.8 32.0	83.0 26.2	77.8 16.0	65.3 -2.1	61.0 -14.2
Lethbridge Experimental Farm...	 { Maximum Minimum	64.5 -12.4	43.0 -35.5	70.0 3.4	87.9 17.0	88.0 18.8	93.7 31.0	98.9 33.5	91.5 30.0	84.0 22.0	76.5 12.0	65.0 -3.1	60.8 -15.0
Medicine Hat...	 { Maximum. Minimum	50.0 -7.0	45.0 -30.0	76.0 16.0	96.0 24.0	84.0 23.0	102.0 30.0	103.0 42.0	87.0 38.0	83.0 33.0	81.0 23.0	.....	.....
Macleod.....	 { Maximum Minimum	57.0 -12.0	42.0 -27.0	68.0 12.0	89.5 23.0	80.0 24.0	91.0 35.0	101.5 44.0	90.0 34.0	82.0 26.0	75.0 15.0	62.0 -3.0	55.0 -13.0
Peace River Crossing.	 { Maximum Minimum	36.0 -20.0	40.0 -36.0	63.0 -27.0	81.0 14.0	80.0 14.0	83.0 30.0	87.0 37.0	85.0 29.0	82.0 25.0	67.0 13.0	42.0 -20.0	45.0 -41.0
Pembina.....	 { Maximum. Minimum	47.5 -24.0	43.0 -38.0	66.0 -24.0	81.0 9.0	79.5 11.0	90.0 26.5	82.0 30.0	81.5 29.0	78.5 16.0	71.0 18.0	45.0 -9.0	45.5 -25.0
Pakan....	 { Maximum Minimum	20.5 -21.0	38.2 -46.0	64.0 -19.2	83.5 11.0	82.5 13.0	89.5 29.0	86.0 36.0	80.0 30.0	77.0 22.0	68.5 9.8	38.7 -16.0	41.0 -28.0
Pincher Creek.	 { Maximum Minimum	53.0 -18.0	40.0 -33.0	64.0 16.0	85.0 20.0	75.0 17.0	86.0 30.0	95.0 35.0	87.0 30.0	78.0 17.0	71.0 11.0	.....	56.0 -10.0
Spirit River.....	 { Maximum Minimum	38.0 -20.0	40.0 -31.0	64.0 -26.0	78.0 11.0	78.0 14.0	81.0 25.0	84.0 36.0	84.0 27.0	79.0 23.0	64.0 9.0	42.0 -20.0	49.0 -30.0
Three Hills Creek.	 { Maximum. Minimum	48.0 -10.0	37.5 -42.5	67.0 2.0	84.0 9.5	86.0 11.5	92.0 29.0	92.0 33.0	85.0 30.5	79.0 21.0	79.0 3.5	50.0 -9.5	48.5 -34.0
Wetaskiwin.....	 { Maximum Minimum	41.0 -17.0	38.0 -38.0	64.0 -8.0	80.0 16.0	84.0 19.0	91.0 32.0	88.0 36.0	83.0 34.0	76.0 27.0	.....	40.0 1.0	44.0 -20.0
Waitefield.....	 { Maximum. Minimum	39.5 -19.0	35.5 -46.5	62.5 -14.0	85.0 14.0	82.0 18.0	90.0 32.0	88.0 40.0	85.0 32.0	79.0 24.5	72.1 13.0	40.0 -14.0	43.1 -25.0

DEPARTMENT OF AGRICULTURE

HOURS OF SUNSHINE RECORDED, 1910.

STATIONS.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
EDMONTON.....	77	154	180	199	243	289	276	223	186	138	45	81	2091
MEDICINE HAT.....	*	125	197	239	264	302	292	216	176	154	*	*	....
LETHBRIDGE.....	*	116	*	248	279	339	362	243	198	165	119	82	....
LACOMBE.....	*	155	203	212	281	297	325	249	194	165	52	72	....
DUNVEGAN.....	47	84	151	210	223	273	265	202	157	135	47	19	1813

*No records furnished.

HAIL INSURANCE, 1910.

Number of contracts..... 5,355
 Number of claims for indemnity..... 1,818

Acreage Insured.

Wheat.....	138,293
Oats.....	170,193
Barley.....	32,067
Flax.....	5,348
Speltz.....	108
Rye.....	2,463
Total.....	<u>348,472</u>

Acreage fully insured.....	290,291
Acreage partially insured.....	58,181
Total.....	<u>348,472</u>

Number of Acres Insured.

At rate of 20 cents per acre.....	63,128
At rate of 30 cents per acre.....	49,571
At rate of 40 cents per acre.....	209,212
Total.....	<u>321,911</u>

Number of acres fully insured.....	290,291
Acreage partially insured reduced to fully insured.....	31,620
Total.....	<u>321,911</u>

Total amount of premiums collected..... \$111,181.96

Estimated acreage under crop..... 1,193,261
 Approximate proportion of total acreage under crop insured, 21%
 Number of acres damaged..... 119,278
 Percentage of insured acres damaged... 37%

Expenses.

Indemnity paid.....	\$393,975.46
Stamps, post cards, etc.....	266.95
Examiners.....	7,264.42
Clerical services.....	1,808.66
Total expenses.....	<u>\$403,313.49</u>

CROP STATISTICS.

The final summing up of the yields of the various grain crops grown in the province during the year 1910 comes as an agreeable surprise, in that they are much heavier than at one time thought probable or even possible. Individual yields are reported that can be called nothing but phenomenal considering the conditions under which the crop was grown. The general impression before harvest was that there would be but little grain to harvest in some districts owing to the droughty conditions which prevailed during the growing season. This forecast was true in a measure of these places, but in some of those districts which suffered from drought it can be truthfully said that the harvest was much greater than expected. There is every reason to be proud of the excellent results obtained from the province as a whole, and particularly in those districts that experienced the severest drought known since grain growing began to assume large proportions.

The total area seeded to grain crops and reported in the May bulletin was 1,582,973 acres. The actual area reported as having been threshed is 1,193,261 acres, as against 1,212,644 the previous year. The total yield of grain amounts to 22,027,184 bushels—an average of 18.46 bushels per acre,—as against a total of 36,761,493 bushels for the previous year. The crop, though smaller than last year, was of high quality.

During the crop-growing period of the year the weather conditions were most unfavourable, in fact the most unfavourable for many years. The latter part of the previous season was somewhat dry, the fall was particularly so, the snowfall of the winter was very light and most of what did fall was blown away, thus exposing the winter wheat and allowing the moisture in the land to escape. Spring opened rather early and conditions were favourable for seeding, although in some districts the land was rather dry. A few small showers fell but not enough to satisfy the demand for moisture. Conditions were not thought to be serious until the copious rains that usually fall during the last half of May and the month of June failed to put in an appearance. The light showers that did fall were insufficient to meet the needs of the growing crops. Parts of the province were favoured with somewhat more moisture, but the province as a whole did not receive the usual amount of rain during the growing season, and not until it was too late to benefit the crop did abundant rain fall.

While this side of the story is true there is another and a very important one which must be taken into consideration. Despite the light rainfall during the growing season, one fact stands out in an indisputable manner: Where the land was carefully and properly prepared, *i.e.*, was summer tilled to conserve the rainfall of the previous year, excellent yields were obtained. Under these conditions as high as 25 bushels of wheat per acre are recorded. This clearly shows that the lack of intelligent methods of cultivation of the land had an important bearing upon the short crop of last year.

As was to be expected under such conditions hail was somewhat more common than in some years. In some of the newer districts some damage was done by early frosts but these frosts disappear with the opening up of the country.

Spring Wheat.—Farmers took advantage of the early opening of spring to seed a very large area to spring wheat. The increase in the area so seeded over 1909 is nearly 39 per cent., and had the

season been a favourable one there would have been a very large amount of wheat to market. As it is, however, the droughty summer combined with indifferent cultivation has resulted in the yield of the province being reduced from 18.97 in 1909 to 12.65 bushels per acre in 1910. The increase in acreage has almost offset the lower yield, with the result that the total yield of spring wheat falls a little short of that of the previous year. It is to be expected that each year will show a steady increase in the acreage sown to spring wheat, as the rich virgin soil is particularly adapted to the successful growth of wheat.

Winter Wheat.—As to be expected in such a season land sown to winter wheat had a much better chance of making a crop than had land sown to spring wheat. As in the case of spring wheat the area harvested shows an increase of almost 40 per cent. over the acreage harvested in 1909. This is a very considerable increase and speaks well for the successful growth of this important grain, when it is remembered that the crop had hardly any protection by snow during the winter and was exposed to the frost and drying winds early in the spring. It is also to be remembered that this crop had but very little rain to assist it in the spring and early summer. Experience is showing year after year that winter wheat is one of the very safest crops to grow. Wherever it has been sown on land properly prepared there has not been a serious failure. Year by year the area capable of growing this grain successfully is extending northward. It is very gratifying to know that it is doing well west of Edmonton on the Macleod River. Several years' trial of it in the Grand Prairie section, of what is broadly spoken of as the "Peace River District," has given such excellent results that much larger areas are being seeded by the settlers. As in the case of spring wheat the increase in acreage has to a certain extent offset the lower yield, so that the total yield for the province falls only a little short of that of the previous year. In 1909 the acreage harvested, 102,167 acres, produced 2,312,344 bushels, while in 1910 the acreage harvested, 142,467 acres, gave a yield of 2,206,564 bushels.

The excellent qualities of "Alberta Red," as the leading winter wheat of the province is called, are winning for it a world-wide reputation. Not only is it being eagerly sought for on the Old Country market for its superior qualities for blending flour, but it is proving a prize winner at leading expositions. At the International Dry Farming Congress, held in Montana in the fall of 1909, wheat of this variety won first honours against all exhibits. Again in the fall of 1910 at the same exposition held in Spokane, Washington, by the Dry Farming Congress and open to the world, exhibits from Alberta won many prizes and words of commendation. In addition to an excellent display by the Department, which easily captured the silver cup offered for the best exhibit by any state or province and which was the centre of attraction, exhibits were made from the respective districts by the Boards of Trade at Cardston, Lethbridge and Macleod.

Winter Wheat for 1911.

Not in many years has the winter wheat entered the winter in such fine condition. The late rains of summer were just what was needed for the newly-seeded winter wheat. The young plants came away nicely, and have made such a root growth that it will take a lot of killing weather to do any damage. It has been well

protected during winter, and at the date of writing is in a most promising condition. It is estimated from the returns of the crop correspondents that fully 200,000 acres were seeded last fall. This is a conservative estimate, as some competent authorities believe that there is fully 225,000 acres seeded.

Oats.—The acreage of this grain shows a heavy decline when compared with 1909, but withal a nice increase over that of 1908. The area of this grain was unduly large in 1909, as owing to the late spring of that year farmers were afraid to seed a large area to spring wheat. In 1910 conditions were reversed, spring opening early the tendency was to seed to wheat as large an area as possible, and the area sown to oats fell much below that of the previous year, and does not show even the proportional gain of other years. The total area of this grain harvested was 492,589 acres, producing 12,158,530 bushels, as compared with 693,901 acres, producing 24,819,661 bushels in 1909.

In studying the tables given below it must be borne in mind that they are based upon returns made by the operators of threshing machines of the work performed by them. The tables, therefore, do not take into account many acres grown and cut for green feed purposes, such as sheaf oats for winter feed and many other small plots of grain.

It has not been possible to obtain full returns from the great sparsely settled country lying to the north and west of Edmonton included in the electoral districts of Athabasca and Peace River. The product of these great districts is consumed within themselves and hence does not figure in the amount of marketable grain in the province.

CROP STATISTICS.

SPRING WHEAT.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston.....	1906	52,910	2,855	18.53	20.62
		1907	116,277	5,718	20.33	
		1908	234,811	9,371	24.73	
		1909	182,570	8,404	21.72	
		1910	194,513	11,044	17.61	
2	Macleod.. .. .	1906	41,538	2,194	18.93	17.84
		1907	90,278	4,191	21.51	
		1908	196,248	9,127	20.50	
		1909	344,877	14,500	23.78	
		1910	56,778	10,874	5.22	
3	Lethbridge.	1906	204,113	9,225	22.12	16.84
		1907	274,036	10,920	25.09	
		1908	357,432	17,271	20.69	
		1909	686,885	35,270	19.75	
		1910	200,368	29,603	6.77	
4	Pincher Creek.....	1906	84,399	3,599	23.45	19.92
		1907	25,404	1,775	14.31	
		1908	10,916	486	22.46	
		1909	28,092	1,287	21.82	
		1910	4,644	569	8.31	
5	Claresholm.. . . .	1906	486,728	20,230	24.05	16.86
		1907	680,721	23,996	28.36	
		1908	1,081,293	57,209	18.90	
		1909	1,497,621	87,780	17.06	
		1910	423,460	58,134	7.28	
6	Medicine Hat.....	1906	127,319	6,820	18.66	13.51
		1907	76,379	6,723	11.36	
		1908	81,370	10,581	7.68	
		1909	317,951	13,945	22.80	
		1910	84,927	12,098	7.02	
7	Nanton... .. .	1906	62,959	3,072	20.49	14.55
		1907	154,349	7,916	19.49	
		1908	273,127	14,518	18.81	
		1909	407,411	21,267	19.15	
		1910	109,392	22,444	4.87	
8	High River.	1906	27,357	1,157	23.64	14.12
		1907	20,222	1,590	12.71	
		1908	85,256	4,252	20.05	
		1909	139,885	6,559	21.33	
		1910	60,221	10,013	6.01	
9	Rocky Mountain....	1906				
		1907	.....	.....	.....	
		1908	.....	.....	.....	
		1909	.....	.....	.....	
		1910	.....	.....	.....	
10	Okotoks.....	1906	34,071	1,213	28.80	18.03
		1907	14,385	844	17.04	
		1908	32,954	1,363	24.17	
		1909	81,356	3,990	20.37	
		1910	60,278	4,961	12.15	

SPRING WHEAT.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
11	Cochrane.....	1906	763	42	18 16	13.24
		1907	840	74	11.35	
		1908	2,287	141	16 21	
		1909	8,889	404	21.50	
		1910	3,570	574	6.22	
12	Gleichen.....	1906	13,454	484	27 79	13.86
		1907	18,525	1,005	18 23	
		1908	37,085	1,447	25.62	
		1909	159,389	6,670	23 89	
		1910	207,082	21,804	9 50	
13	Didsbury.....	1906	24,660	1,259	19 58	24.94
		1907	6,744	455	14.82	
		1908	21,878	890	24 58	
		1909	72,778	2,966	24 53	
		1910	88,403	8,598	10 28	
14	Olds.....	1906	16,824	797	21.10	16.79
		1907	5,349	427	12.52	
		1908	12,635	665	19 00	
		1909	51,780	1,926	26 88	
		1910	46,544	4,114	11.31	
15	Stettler.....	1906	44,715	2,907	15 38	16.30
		1907	76,941	4,358	17.65	
		1908	194,522	9,386	20 72	
		1909	313,710	16,513	18 99	
		1910	595,639	41,998	14 18	
16	Sedgewick ..	1906	36,472	1,654	22 05	17.39
		1907	68,952	3,922	17 58	
		1908	281 455	16,650	16.90	
		1909	522 373	36,374	14.36	
		1910	1,492,032	79,504	18.77	
17	Innisfail..	1906	12,207	608	20.07	19.29
		1907	3,409	259	13.16	
		1908	14,728	714	20 62	
		1909	21,508	940	22 87	
		1910	28,105	1,625	17 30	
18	Red Deer.....	1906	22,288	921	24 19	20.41
		1907	5,403	323	16.72	
		1908	12,472	598	20.85	
		1909	16,299	727	22 41	
		1910	44,112	2,359	18.70	
19	Lacombe.....	1906	21,792	924	23 58	17.99
		1907	12,142	796	15 25	
		1908	21,186	933	22 70	
		1909	32,930	1,611	20 44	
		1910	111,584	6,831	16.34	
20	Ponoka.....	1906	43,027	1,782	24 14	21.99
		1907	19,068	1,033	18 45	
		1908	38,825	1,911	20 31	
		1909	43,337	2,106	20 57	
		1910	78,064	3,279	23.81	

SPRING WHEAT.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
21	Wetaskiwin.....	1906	64,109	2,650	24.19	23.54
		1907	24,441	1,409	17.34	
		1908	30,438	1,590	19.14	
		1909	28,973	1,295	22.38	
		1910	51,691	2,767	18.68	
22	Leduc.....	1906	54,777	2,147	25.51	20.75
		1907	24,527	1,776	13.81	
		1908	42,028	2,232	18.82	
		1909	21,256	881	24.17	
		1910	33,986	1,475	23.04	
23	Camrose.....	1906	174,985	8,642	20.24	17.16
		1907	97,734	6,188	15.79	
		1908	174,935	9,451	18.50	
		1909	139,720	8,144	17.15	
		1910	209,410	14,014	14.94	
24	Alexandra.....	1906	34,456	1,478	23.31	15.81
		1907	23,145	1,599	14.47	
		1908	108,590	6,081	17.85	
		1909	245,989	12,146	20.52	
		1910	405,575	30,427	13.35	
25	Vermilion.....	1906	50,444	1,887	26.53	16.23
		1907	25,683	1,555	16.51	
		1908	61,319	4,003	15.31	
		1909	248,260	11,278	22.01	
		1910	373,908	28,075	13.32	
26	Vegreville.....	1906	114,877	5,187	22.14	15.71
		1907	84,662	6,157	13.75	
		1908	155,416	9,503	16.35	
		1909	199,327	10,033	19.87	
		1910	166,403	15,002	12.56	
27	Strathcona.....	1906	230,003	5,987	28.41	25.44
		1907	50,828	3,262	15.58	
		1908	64,089	3,247	19.73	
		1909	55,557	2,573	21.59	
		1910	78,281	3,749	20.88	
28	Stony Plain.....	1906	178,960	7,368	24.28	19.81
		1907	52,699	3,625	14.53	
		1908	63,079	3,190	19.77	
		1909	52,909	2,945	17.96	
		1910	78,325	4,371	17.92	
29	Lac Ste. Anne ..	1906				17.63
		1907	851	36	23.63	
		1908	2,349	178	13.19	
		1909	321	9	35.66	
		1910	1,221	46	26.54	
30	Pembina.....	1906	2,210	100	22.10	18.64
		1907	2,673	168	15.91	
		1908	5,310	270	19.66	
		1909	1,882	114	16.50	
		1910	3,861	203	19.30	

SPRING WHEAT.—Continued.

No.	CROP DISTRICT.	Year	Bushels	Acreage	Yield per acre	Average yield
31	St. Albert.	1906	48,046	2,155	22.29	20.94
		1907	4,145	325	12.75	
		1908	31,649	1,612	19.63	
		1909	13,741	717	19.14	
		1910	12,478	446	27.98	
32	Sturgeon.	1906	105,111	4,372	24.04	20.38
		1907	28,084	1,964	14.29	
		1908	58,247	3,219	18.09	
		1909	27,150	1,392	19.50	
		1910	69,393	3,183	21.80	
33	Victoria.	1906	183,548	8,031	22.85	18.83
		1907	85,794	5,955	14.40	
		1908	146,942	7,820	18.79	
		1909	146,786	7,484	19.90	
		1910	230,093	12,825	17.94	
34	Pakan.	1906	2,535	124	20.44	20.71
		1907	10,585	580	18.25	
		1908	14,035	749	18.73	
		1909	30,041	1,385	21.69	
		1910	39,341	1,824	21.56	
35	Athabasca.	1906	2,230	68	32.79	21.60
		1907	20,173	932	21.64	
		1908	964	31	31.09	
		1909	2,477	105	23.58	
		1910	2,878	194	14.84	
36	Peace River.	1906				22.04
		1907	.....	.....	.....	
		1908	22,704	674	33.68	
		1909	11,425	732	15.60	
		1910	29,396	1,476	19.92	

WINTER WHEAT.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston.	1906	150,070	7,438	20.17	23.75
		1907	387,011	12,782	30.27	
		1908	380,625	14,153	26.89	
		1909	733,626	28,227	25.99	
		1910	598,671	32,189	18.59	
2	Macleod.	1906	13,594	762	17.83	20.65
		1907	33,744	1,342	25.14	
		1908	48,858	1,483	32.94	
		1909	105,557	3,911	26.98	
		1910	18,337	5,580	12.25	
3	Lethbridge	1906	128,326	7,758	16.54	21.12
		1907	134,241	5,235	25.64	
		1908	126,912	4,112	30.86	
		1909	212,852	8,767	24.27	
		1910	40,709	4,580	8.89	

WINTER WHEAT.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
4	Pincher Creek. . . .	1906	246,283	9,704	25.37	22.81
		1907	172,167	7,583	22.70	
		1908	218,656	8,175	26.74	
		1909	193,878	8,182	23.69	
		1910	300,288	15,942	18.84	
5	Claresholm.	1906	283,612	11,593	24.46	24.43
		1907	297,500	11,955	24.88	
		1908	471,399	16,801	28.05	
		1909	278,989	9,836	28.36	
		1910	67,114	7,054	9.52	
6	Medicine Hat.	1906	104	6	17.33	18.89
		1907	17,575	1,038	16.93	
		1908	8,858	335	26.44	
		1909	33,662	1,382	24.35	
		1910	26,531	1,829	14.50	
7	Nanton.	1906	80,309	4,038	19.88	21.23
		1907	215,367	10,129	21.26	
		1908	279,617	9,697	28.83	
		1909	153,744	8,039	19.12	
		1910	52,896	4,819	10.98	
8	High River.	1906	54,328	2,738	19.84	20.26
		1907	316,492	25,998	12.17	
		1908	670,678	21,745	30.84	
		1909	321,389	9,413	34.13	
		1910	110,641	12,840	8.62	
9	Rocky Mountain. . .	1906				21.40
		1907	.....	.....	.....	
		1908	214	10	21.40	
		1909	.....	.....	.....	
		1910	.....	.....	.....	
10	Okotoks.	1906	17,100	565	28.08	19.71
		1907	67,472	3,515	19.19	
		1908	76,751	2,921	26.27	
		1909	47,417	2,713	17.47	
		1910	48,465	3,336	14.53	
11	Cochrane.	1906	25,450	1,000	25.45	16.77
		1907	23,709	1,461	16.22	
		1908	44,830	1,691	26.51	
		1909	21,292	1,440	14.78	
		1910	94,251	6,913	13.63	
12	Gleichen.	1906	14,773	588	25.12	21.05
		1907	33,602	2,085	16.11	
		1908	127,689	3,921	32.55	
		1909	43,821	1,605	27.30	
		1910	94,029	8,682	10.83	
13	Didsbury.	1906	141,707	6,390	22.17	21.18
		1907	74,387	4,241	17.54	
		1908	272,121	8,776	31.00	
		1909	42,937	2,096	20.47	
		1910	215,593	13,746	15.68	

WINTER WHEAT.—*Continued.*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
14	Olds	1906	24,176	715	33.81	19.25
		1907	15,448	1,058	14.60	
		1908	27,824	1,357	20.50	
		1909	33,225	1,739	19.10	
		1910	33,730	2,112	15.97	
15	Stettler	1906	23	1	23.00	21.15
		1907	6,953	214	32.49	
		1908	17,236	749	23.01	
		1909	2,601	247	10.53	
		1910	1,861	145	12.83	
16	Sedgewick	1906	25	1	25.00	15.18
		1907	57	2	28.50	
		1908	998	75	13.30	
		1909	1,324	77	17.19	
		1910	39,094	2,578	15.16	
17	Innisfail	1906	8,845	278	31.81	21.44
		1907	8,652	832	10.39	
		1908	38,906	1,419	27.41	
		1909	7,436	404	15.92	
		1910	39,713	1,897	20.93	
18	Red Deer	1906	21,583	710	30.39	21.51
		1907	25,965	1,133	22.91	
		1908	34,363	1,121	30.65	
		1909	15,350	963	15.94	
		1910	49,117	2,878	17.07	
19	Lacombe	1906	3,047	122	24.97	22.26
		1907	11,374	500	22.74	
		1908	28,624	1,136	25.19	
		1909	20,231	1,270	15.92	
		1910	91,034	3,905	23.31	
20	Ponoka	1906	952	36	26.44	19.67
		1907	5,088	209	24.34	
		1908	5,627	252	22.32	
		1909	9,794	550	17.88	
		1910	11,625	635	18.31	
21	Wetaskiwin	1906	3,206	160	20.37	21.17
		1907	3,968	169	23.42	
		1908	1,906	99	19.25	
		1909	9,314	418	22.27	
		1910	34,031	1,631	20.87	
22	Leduc	1906	264	9	29.33	23.39
		1907	3,656	176	20.77	
		1908	8,492	310	27.39	
		1909	3,063	193	15.87	
		1910	27,074	1,131	23.89	
23	Camrose	1906	4,833	253	19.10	17.24
		1907	4,196	227	18.48	
		1908	3,180	146	21.78	
		1909	5,233	328	15.95	
		1910	17,598	1,078	16.32	

WINTER WHEAT.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
24	Alexandra	1906	400	17	23.52	16.58
		1907	281	19	14.78	
		1908	92	5	18.40	
		1909	32	1	32.00	
		1910	21,266	1,331	15.98	
25	Vermilion. . . .	1906	43	3	14.33	18.08
		1907	270	18	15.00	
		1908	781	41	19.04	
		1909	31	3	10.33	
		1910	5,256	288	18.25	
26	Vegreville. . . .	1906	442	13	34.00	14.86
		1907	3,525	228	15.46	
		1908	2,271	97	23.41	
		1909	1,612	210	7.67	
		1910	19,177	1,271	15.09	
27	Strathcona. . . .	1906				25.18
		1907	6,823	278	24.54	
		1908	8,155	271	30.09	
		1909	4,595	159	28.90	
		1910	15,157	671	22.59	
28	Stony Plain... .	1906	536	44	12.18	20.65
		1907	4,985	283	17.61	
		1908	7,940	401	19.80	
		1909	10,198	710	14.35	
		1910	45,640	1,918	23.71	
29	Lac Ste. Anne... .	1906				20.71
		1907	.....	.....	.....	
		1908	760	36	21.11	
		1909	172	9	19.11	
		1910	.....	.....	.....	
30	Pembina...	1906				25.30
		1907	.....	.....	.....	
		1908	.....	.....	.....	
		1909	.....	.....	.....	
		1910	1,164	46	25.30	
31	St. Albert.....	1906	2,634	115	22.90	24.64
		1907	.....	.....	.....	
		1908	826	51	16.19	
		1909	3,453	150	23.00	
		1910	5,359	182	29.45	
32	Sturgeon.....	1906	12,597	626	20.12	22.64
		1907	1,681	72	23.34	
		1908	4,631	148	31.29	
		1909	2,847	146	19.50	
		1910	12,070	502	24.04	
33	Victoria.....	1906				22.09
		1907	841	50	16.82	
		1908	955	34	28.08	
		1909	1,565	83	18.85	
		1910	13,475	595	22.65	

WINTER WHEAT.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
34	Pakan	1906				21.86
		1907	363	12	30.25	
		1908	.....	.....	.....	
		1909	.....	.....	.....	
		1910	2,742	130	21.09	
35	Athabasca.....	1906	81	6	13.50	16.78
		1907	305	35	8.71	
		1908	.....	.....	.....	
		1909	.....	.....	.....	
		1910	856	33	25.94	
36	Peace River	1906				
		1907	.....	.....	.....	
		1908	.....	.....	.....	
		1909	.....	.....	.....	
		1910				

OATS.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston.....	1906	290,053	9,121	31.80	36.28
		1907	333,606	9,280	35.94	
		1908	364,944	10,034	36.37	
		1909	708,804	17,111	41.42	
		1910	38,167	2,291	16.66	
2	Macleod.	1906	41,734	1,037	40.24	36.58
		1907	37,387	1,218	30.69	
		1908	60,292	1,903	31.68	
		1909	209,087	5,360	39.01	
		1910	2,223	70	31.76	
3	Lethbridge.....	1906	342,058	8,273	41.34	32.66
		1907	215,119	6,223	34.56	
		1908	323,873	10,182	31.80	
		1909	536,527	17,808	30.12	
		1910	56,526	2,644	21.37	
4	Pincher Creek	1906	501,145	13,235	37.86	34.98
		1907	193,398	6,002	32.22	
		1908	254,533	7,746	32.85	
		1909	212,532	5,222	40.69	
		1910	27,292	1,785	15.29	
5	Claresholm	1906	497,802	12,972	38.37	34.88
		1907	251,552	8,055	31.22	
		1908	404,143	11,985	33.72	
		1909	783,121	21,499	36.42	
		1910	14,330	1,424	10.06	
6	Medicine Hat.....	1906	104,609	3,906	26.78	27.53
		1907	87,573	4,250	20.60	
		1908	60,662	4,099	14.79	
		1909	378,815	9,650	39.24	
		1910	25,300	1,958	12.92	

OATS.—Continued.

No	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
7	Nanton.....	1906	473,465	10,903	43.42	33.70
		1907	305,860	8,014	38.16	
		1908	463,009	14,140	32.74	
		1909	908,742	28,091	32.34	
		1910	108,647	5,906	18.23	
8	High River.....	1906	1,263,990	24,227	52.17	39.31
		1907	529,452	17,089	30.98	
		1908	1,739,964	39,322	44.24	
		1909	2,663,238	67,942	39.15	
		1910	175,576	13,517	12.99	
9	Rocky Mountain...	1906				19.73
		1907	600	35	17.14	
		1908	1,274	60	21.23	
		1909	.....	.....	.....	
		1910	.....	.....	.....	
10	Okotoks.....	1906	709,151	15,643	45.33	41.27
		1907	296,639	7,785	38.10	
		1908	652,825	15,519	42.06	
		1909	1,148,105	25,762	44.56	
		1910	79,742	5,230	15.25	
11	Cochrane	1906	125,413	2,895	43.32	35.49
		1907	123,876	4,367	28.36	
		1908	115,721	2,998	28.59	
		1909	430,001	9,816	44.87	
		1910	77,213	4,501	17.15	
12	Gleichen.....	1906	622,720	12,638	49.27	38.98
		1907	322,008	9,648	33.37	
		1908	842,358	19,119	44.05	
		1909	1,977,643	41,536	47.61	
		1910	415,800	24,298	17.11	
13	Didsbury.....	1906	815,777	18,184	44.86	34.74
		1907	559,889	19,202	29.15	
		1908	1,214,959	29,547	41.11	
		1909	1,974,309	50,199	39.33	
		1910	747,948	35,779	20.90	
14	Olds.....	1906	269,040	6,910	38.93	20.26
		1907	326,430	12,020	27.15	
		1908	473,040	15,318	30.88	
		1909	861,769	23,814	36.18	
		1910	293,535	14,484	20.27	
15	Stettler.....	1906	177,247	6,165	28.75	30.18
		1907	331,861	9,217	36.00	
		1908	638,303	15,318	36.79	
		1909	729,909	22,972	32.10	
		1910	425,819	22,632	18.81	
16	Sedgewick.....	1906	135,398	3,531	38.34	27.44
		1907	156,170	4,413	35.38	
		1908	536,623	15,922	33.70	
		1909	749,583	28,206	26.57	
		1910	595,764	27,151	21.94	

OATS.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
17	Innisfail.	1906	253,043	8,004	31.61	31.22
		1907	205,971	8,020	25.68	
		1908	365,311	10,824	33.75	
		1909	576,301	16,229	35.50	
		1910	469,135	16,805	27.92	
18	Red Deer.	1906	420,170	10,318	40.72	33.38
		1907	172,855	5,923	29.18	
		1908	350,666	9,644	36.36	
		1909	392,701	12,397	31.67	
		1910	322,763	11,421	28.26	
19	Lacombe.	1906	483,341	12,861	37.58	32.42
		1907	352,365	12,870	27.37	
		1908	452,390	12,641	35.78	
		1909	638,216	20,407	31.27	
		1910	872,674	27,566	31.66	
20	Ponoka.	1906	392,376	10,655	36.82	34.17
		1907	227,966	9,089	25.08	
		1908	459,679	12,069	36.28	
		1909	542,273	13,026	41.62	
		1910	461,756	16,155	28.52	
21	Wetaskiwin.	1906	572,274	19,000	30.11	31.54
		1907	546,844	19,322	28.30	
		1908	579,347	14,441	40.11	
		1909	876,408	26,969	32.45	
		1910	699,722	24,106	29.02	
22	Leduc.	1906	465,643	12,140	38.35	31.36
		1907	520,012	15,451	33.65	
		1908	560,383	18,026	31.08	
		1909	491,777	18,596	26.45	
		1910	598,881	19,875	30.13	
23	Camrose.	1906	729,380	24,206	30.13	28.80
		1907	626,114	21,359	29.31	
		1908	1,065,212	28,208	37.76	
		1909	1,345,214	43,871	30.82	
		1910	905,425	44,549	20.07	
24	Alexandra.	1906	89,281	1,807	49.40	31.91
		1907	73,418	2,610	28.12	
		1908	288,687	8,756	32.97	
		1909	587,230	15,326	38.31	
		1910	317,712	14,006	22.68	
25	Vermilion.	1906	180,270	4,301	41.91	30.40
		1907	123,800	4,000	30.95	
		1908	256,070	8,321	30.77	
		1909	693,011	19,175	36.14	
		1910	396,993	18,480	21.48	
26	Vegreville.	1906	481,465	11,404	42.21	35.72
		1907	503,417	17,539	28.70	
		1908	1,779,862	27,248	28.62	
		1909	1,133,872	36,118	31.36	
		1910	563,020	32,589	17.28	

OATS.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
27	Strathcona	1906	694,118	15,628	44.41	36.59
		1907	453,963	13,903	32.65	
		1908	515,140	13,055	39.45	
		1909	680,058	20,009	33.98	
		1910	590,539	17,581	33.59	
28	Stony Plain	1906	346,429	9,112	37.99	32.36
		1907	242,675	8,162	29.73	
		1908	304,748	9,414	32.25	
		1909	441,274	13,672	32.20	
		1910	352,576	11,788	29.92	
29	Lac Ste. Anne	1906				35.19
		1907	18,277	292	62.59	
		1908	23,311	860	27.10	
		1909	9,644	357	27.29	
		1910	21,611	561	38.32	
30	Pembina	1906	14,366	632	22.73	28.45
		1907	22,770	876	25.99	
		1908	46,823	1,889	24.78	
		1909	80,496	2,862	28.11	
		1910	148,951	4,758	31.31	
31	St. Albert	1906	470,454	11,977	39.28	35.32
		1907	269,075	11,037	24.37	
		1908	502,355	14,073	35.69	
		1909	602,960	17,412	34.62	
		1910	647,945	16,073	40.31	
32	Sturgeon	1906	425,123	9,796	43.39	36.52
		1907	405,269	11,670	34.72	
		1908	564,711	14,937	37.80	
		1909	606,450	17,519	34.66	
		1910	884,598	25,114	35.22	
33	Victoria	1906	509,762	18,387	22.85	31.22
		1907	357,720	13,350	26.79	
		1908	421,057	12,727	33.08	
		1909	737,804	21,315	34.61	
		1910	639,811	19,619	32.61	
34	Pakan	1906	16,771	423	39.64	27.65
		1907	72,132	2,610	27.63	
		1908	54,466	2,048	26.59	
		1909	85,201	2,836	30.00	
		1910	174,089	6,647	26.19	
35	Athabasca	1906	9,906	135	73.37	34.42
		1907	30,119	1,058	28.46	
		1908	1,777	60	29.61	
		1909	28,438	649	43.81	
		1910	30,795	1,033	29.81	
36	Peace River	1906				24.02
		1907	6,516	413	15.77	
		1908	3,998	72	55.52	
		1909	4,157	167	24.89	
		1910	5,552	190	29.22	

BARLEY.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston.....	1906	52,044	1,363	38.18	29.89
		1907	14,276	669	21.33	
		1908	26,925	984	27.36	
		1909	18,610	631	29.49	
		1910	1,594	149	10.70	
2	Macleod.....	1906	2,616	111	23.56	25.30
		1907	1,311	43	30.48	
		1908	2,722	80	34.02	
		1909	4,674	208	22.46	
		1910	214	14	15.29	
3	Lethbridge.....	1906	16,732	598	27.97	24.65
		1907	9,738	415	23.46	
		1908	40,917	1,704	24.01	
		1909	16,308	674	25.20	
		1910	1,082	48	22.54	
4	Pincher Creek.....	1906	14,518	561	25.87	30.16
		1907	4,003	175	22.85	
		1908	4,707	195	24.13	
		1909	17,257	402	42.92	
		1910	106	13	8.15	
5	Claresholm.....	1906	36,791	1,787	20.58	21.37
		1907	20,202	1,080	18.70	
		1908	20,382	915	22.27	
		1909	26,710	1,086	24.58	
		1910	74	5	14.80	
6	Medicine Hat.....	1906	17,835	786	22.69	23.74
		1907	9,174	448	20.47	
		1908	3,800	459	8.27	
		1909	37,767	1,115	33.85	
		1910	1,584	147	10.71	
7	Nanton.....	1906	32,385	1,122	26.45	24.11
		1907	14,788	687	21.52	
		1908	25,354	1,191	21.28	
		1909	11,713	491	23.85	
		1910	40	4	10.00	
8	High River.....	1906	90,455	2,566	35.25	27.50
		1907	45,036	1,349	33.38	
		1908	87,323	3,738	23.36	
		1909	92,268	3,350	27.51	
		1910	2,424	544	4.46	
9	Rocky Mountain....	1906				18.75
		1907	114	6	.19	
		1908	36	2	18	
		1909	.....	.....	.....	
		1910	.....	.....	.....	
10	Okotoks.....	1906	74,766	2,499	29.91	28.94
		1907	53,416	1,927	27.71	
		1908	100,836	3,284	30.70	
		1909	121,253	3,997	30.36	
		1910	5,245	576	9.11	

BARLEY.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
11	Cochrane.....	1906	23,895	836	28.58	25.02
		1907	19,151	982	19.50	
		1908	26,163	1,158	22.59	
		1909	75,590	2,361	32.01	
		1910	5,135	656	7.83	
12	Gleichen.....	1906	51,241	1,880	27.25	22.53
		1907	23,917	1,186	20.16	
		1908	69,641	2,572	27.07	
		1909	129,349	4,759	27.14	
		1910	29,387	3,776	7.78	
13	Didsbury.....	1906	154,028	5,197	29.63	24.40
		1907	73,593	3,653	20.14	
		1908	194,312	7,210	26.95	
		1909	270,852	10,070	26.89	
		1910	90,396	5,963	15.16	
14	Olds.....	1906	55,513	1,811	30.65	23.67
		1907	34,248	1,929	17.75	
		1908	52,353	2,593	20.19	
		1909	114,659	3,879	29.55	
		1910	43,814	2,488	17.61	
15	Stettler.....	1906	27,731	1,293	21.44	21.63
		1907	37,243	1,751	21.26	
		1908	65,054	2,459	26.45	
		1909	61,635	2,515	24.50	
		1910	33,026	2,369	13.98	
16	Sedgewick.....	1906	9,502	425	22.35	18.39
		1907	10,736	537	20.00	
		1908	28,358	1,645	17.23	
		1909	40,810	1,980	20.61	
		1910	41,622	2,536	16.41	
17	Innisfail.....	1906	84,896	2,786	30.47	25.00
		1907	41,566	1,981	20.98	
		1908	74,126	2,974	24.92	
		1909	92,235	3,672	25.11	
		1910	86,434	3,756	23.01	
18	Red Deer.....	1906	73,815	2,434	30.32	25.31
		1907	20,673	867	23.84	
		1908	50,453	2,057	24.52	
		1909	78,894	2,992	23.37	
		1910	65,427	2,944	22.22	
19	Lacombe.....	1906	78,735	2,638	29.84	24.38
		1907	32,951	1,562	21.09	
		1908	73,233	2,948	24.84	
		1909	81,736	3,901	20.95	
		1910	141,980	5,712	24.86	
20	Ponoka.....	1906	107,121	3,828	27.98	25.49
		1907	37,871	2,099	18.04	
		1908	70,069	2,753	25.45	
		1909	83,400	2,536	32.92	
		1910	100,462	4,438	22.64	

BARLEY.—*Continued.*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
21	Wetaskiwin.....	1906	106,986	3,653	29.28	23.67
		1907	62,001	3,176	19.52	
		1908	52,064	2,110	24.67	
		1909	65,949	3,382	19.50	
		1910	88,329	3,958	22.32	
22	Leduc.....	1906	73,949	2,454	30.13	22.83
		1907	57,719	3,120	18.50	
		1908	66,440	3,466	19.16	
		1909	81,947	3,658	23.40	
		1910	102,406	4,052	25.27	
23	Camrose.....	1906	98,380	4,793	20.52	21.24
		1907	101,207	4,617	21.92	
		1908	109,604	4,183	26.20	
		1909	123,725	5,458	22.66	
		1910	80,311	5,112	15.71	
24	Alexandra.....	1906	13,309	501	25.56	21.77
		1907	6,470	380	17.02	
		1908	33,606	1,538	21.85	
		1909	43,714	1,793	24.38	
		1910	22,878	1,298	17.63	
25	Vermilion.....	1906	19,185	683	28.08	21.86
		1907	9,820	411	23.89	
		1908	22,370	1,111	20.13	
		1909	70,678	2,760	25.00	
		1910	44,365	2,653	16.72	
26	Vegreville.....	1906	73,001	2,447	29.83	21.41
		1907	69,249	3,303	20.83	
		1908	92,954	3,993	23.27	
		1909	151,299	6,251	24.20	
		1910	82,250	5,897	13.94	
27	Strathcona.....	1906	187,100	5,495	34.04	27.60
		1907	85,978	4,531	18.97	
		1908	96,952	3,684	26.31	
		1909	162,259	5,912	27.61	
		1910	164,212	5,611	29.26	
28	Stony Plain.....	1906	110,709	3,336	33.18	25.64
		1907	34,328	2,578	13.31	
		1908	85,671	2,820	30.37	
		1909	117,817	4,405	26.21	
		1910	96,610	4,222	22.88	
29	Lac Ste. Anne.....	1906	820	62	13.32	19.96
		1907	7,083	401	17.66	
		1908	1,496	136	11.00	
		1909	6,293	187	33.65	
		1910	2,398	148	16.20	
30	Pembina.....	1906	2,613	130	20.10	22.72
		1907	10,946	455	24.05	
		1908	18,494	886	20.87	
		1909	26,926	1,083	24.86	
		1910				

BARLEY.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
31	St. Albert . .	1906	86,629	3,020	28 68	27.38
		1907	28,355	1,552	18 27	
		1908	82,588	2,303	35.86	
		1909	124,499	5,167	24.09	
		1910	87,550	2,916	30.02	
32	Sturgeon. .	1906	127,514	3,692	34 53	27.68
		1907	56,474	3,035	18.60	
		1908	117,540	4,212	27.90	
		1909	147,560	5,342	27.62	
		1910	186,538	6,680	27 93	
33	Victoria. . . .	1906	159,656	5,068	31 50	21.59
		1907	73,759	3,933	18.65	
		1908	110,894	6,348	17 46	
		1909	204,984	10,512	19.52	
		1910	194,514	8,565	22 71	
34	Pakan.	1906	5,536	226	24.49	22.14
		1907	14,317	652	21.95	
		1908	16,316	678	24 06	
		1909	25,124	1,115	22.53	
		1910	43,444	2,059	21 09	
35	Athabasca.	1906	1,547	39	39.66	31.32
		1907	10,277	282	36.44	
		1908	460	15	30 66	
		1909	4,511	178	25 33	
		1910	2,625	106	24 76	
36	Peace River. . . .	1906				29 16
		1907	.....	.....	.....	
		1908	5,569	130	42.83	
		1909	5,546	227	24.43	
		1910	10,232	364	28.11	

FLAX.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston	1906				14.30
		1907	.....	.....	.....	
		1908	3,858	246	15.68	
		1909	1,780	147	12.11	
		1910	.....	.....	.....	
2	Macleod.	1906				5.00
		1907	.....	.....	.....	
		1908	.....	.....	.....	
		1909	165	33	5.00	
		1910	.....	.....	.....	
3	Lethbridge.	1906	4,276	414	10.32	7.88
		1907	4,823	1,051	4 78	
		1908	10,064	1,475	6.82	
		1909	17,166	1,637	10.48	
		1910	22	34	.65	

FLAX.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
4	Pincher Creek. . . .	1906	332	18	18.44	11 11
		1907	120	20	6.00	
		1908	.. ..	.. ..	.. ..	
		1909	281	28	10.03	
		1910	.. ..	.. ..	.. ..	
5	Claresholm.	1906	11,556	981	11.77	9.89
		1907	29,369	3,125	9.39	
		1908	3,714	436	8.51	
		1909	1,467	121	12.13	
		1910	.. ..	.. ..	.. ..	
6	Medicine Hat. . .	1906	777	69	11.26	6.56
		1907	489	120	4.08	
		1908	3,127	532	5.87	
		1909	1,823	174	10.47	
		1910	393	113	3.48	
7	Nanton.	1906	10,350	1,547	6.69	7.39
		1907	7,422	821	9.04	
		1908	6,761	858	7.88	
		1909	2,660	454	5.85	
		1910	.. ..	.. ..	.. ..	
8	High River.	1906	3,620	300	12.06	8.12
		1907	1,702	257	6.62	
		1908	9,039	1,237	7.30	
		1909	911	87	10.47	
		1910	.. ..	.. ..	.. ..	
9	Rocky Mountain. . .	1906				
		1907	.. ..	.. ..	.. ..	
		1908	.. ..	.. ..	.. ..	
		1909	.. ..	.. ..	.. ..	
		1910	.. ..	.. ..	.. ..	
10	Okotoks.	1906	246	10	24.60	15.87
		1907	187	37	5.05	
		1908	1,269	104	12.00	
		1909	8,089	420	19.25	
		1910	769	95	8.09	
11	Cochrane.	1906				13.52
		1907	10	2	5.00	
		1908	378	41	9.21	
		1909	4,958	206	24.06	
		1910	873	211	4.14	
12	Gleichen.	1906	1,134	94	12.06	7.77
		1907	109	21	5.19	
		1908	6,946	555	12.51	
		1909	51,822	4,498	11.52	
		1910	12,754	4,174	3.06	
13	Didsbury.	1906	1,804	163	10.06	5.65
		1907	143	15	9.53	
		1908	2,314	342	6.76	
		1909	4,305	306	14.06	
		1910	3,217	1,258	2.57	

FLAX.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
14	Olds.....	1906	104	17	6.11	8.21
		1907	41	4	10.25	
		1908	385	45	8.55	
		1909	1,151	102	11.28	
		1910	1,703	244	6.98	
15	Stettler.....	1906	1,495	343	4.35	6.03
		1907	2,254	402	5.60	
		1908	8,261	1,019	8.10	
		1909	10,452	1,282	8.15	
		1910	10,409	2,405	4.33	
16	Sedgewick.....	1906	1,624	198	8.20	5.32
		1907	1,461	303	4.82	
		1908	7,761	1,163	6.67	
		1909	11,069	1,648	6.71	
		1910	10,369	2,761	3.76	
17	Innisfail.....	1906				9.04
		1907	.....	.....	.....	
		1908	13	3	4.33	
		1909	75	7	10.71	
		1910	120	13	9.23	
18	Red Deer.....	1906	549	37	14.83	5.76
		1907	15	1	15.00	
		1908	246	11	22.36	
		1909	165	13	12.69	
		1910	397	176	2.26	
19	Lacombe.....	1906	114	8	14.24	12.24
		1907	.....	.....	.....	
		1908	175	10	17.50	
		1909	246	16	15.38	
		1910	334	37	9.03	
20	Ponoka.....	1906	346	36	9.61	9.69
		1907	53	7	7.56	
		1908	121	14	8.64	
		1909	314	29	10.83	
		1910	.....	.....	.....	
21	Wetaskiwin.....	1906	298	14	21.28	13.64
		1907	.....	.....	.....	
		1908	12	1	12.00	
		1909	229	13	17.21	
		1910	143	22	6.50	
22	Leduc.....	1906				21.48
		1907	16	1	16.00	
		1908	.....	.....	.....	
		1909	367	15	24.46	
		1910	111	7	15.86	
23	Camrose.....	1906	707	66	10.71	7.84
		1907	1,605	189	8.49	
		1908	1,698	149	11.39	
		1909	3,027	317	9.54	
		1910	2,107	445	4.51	

FLAX.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
24	Alexandra.	1906	651	56	11.62	7.57
		1907	516	67	7.70	
		1908	1,914	171	11.19	
		1909	7,241	750	9.65	
		1910	8,513	1,444	5.89	
25	Vermilion.	1906	180	19	9.47	4.17
		1907	82	16	5.12	
		1908	301	47	6.40	
		1909	1,294	139	9.30	
		1910	2,002	686	2.92	
26	Vegreville	1906	261	22	11.86	8.40
		1907	142	29	4.89	
		1908	1,091	88	12.39	
		1909	210	12	17.50	
		1910	580	121	4.79	
27	Strathcona	1906	22	2	11.00	12.43
		1907	32	2	16.00	
		1908	...	...	...	
		1909	232	19	12.21	
		1910	...	...	...	
28	Stony Plain.	1906	30	2	15.00	15.75
		1907	...	...	...	
		1908	50	4	12.50	
		1909	32	1	32.00	
		1910	14	1	14.00	
29	Lac Ste. Anne	1906	...	...	...	...
		1907	...	...	...	
		1908	...	...	...	
		1909	...	...	...	
		1910	...	...	...	
30	Pembina.	1906	...	...	...	...
		1907	...	...	...	
		1908	...	...	...	
		1909	...	...	...	
		1910	...	...	...	
31	St. Albert.	1906	...	...	...	8.33
		1907	...	...	...	
		1908	25	3	8.33	
		1909	...	...	...	
		1910	...	...	...	
32	Sturgeon.	1906	14	1	14.00	12.15
		1907	...	...	...	
		1908	...	...	...	
		1909	...	...	...	
		1910	144	12	12.00	
33	Victoria.	1906	130	7	18.57	11.92
		1907	...	...	...	
		1908	10	1	10.00	
		1909	77	5	15.40	
		1910	81	12	6.75	

FLAX.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
34	Pakan.....	1906				19.00
		1907	.....	.....	.....	
		1908	76	4	19.00	
		1909	.....	.....	.....	
		1910	.....	.....	.....	
35	Athabasca.....	1906				
		1907	.....	.....	.....	
		1908	.....	.....	.....	
		1909	.....	.....	.....	
		1910	.....	.....	.....	

RYE.

No	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston.	1906				20.11
		1907	2,052	102	20.11	
		1908	.....	.....	.....	
		1909	.....	.....	.....	
		1910	.....	.....	.....	
2	Macleod.....	1906	279	18	15.50	15.50
		1907	.....	.....	.....	
		1908	.....	.....	.....	
		1909	.....	.....	.....	
		1910	.....	.....	.....	
3	Lethbridge.	1906	170	8	21.25	11.84
		1907	.....	.....	.....	
		1908	345	28	12.32	
		1909	77	14	5.60	
		1910	.....	.....	.....	
4	Pincher Creek..	1906				
		1907	.....	.....	.....	
		1908	.....	.....	.....	
		1909	.....	.....	.....	
		1910	.....	.....	.....	
5	Claresholm..	1906	142	12	11.83	11.33
		1907	28	3	9.33	
		1908	.....	.....	.....	
		1909	.....	.....	.....	
		1910	.....	.....	.....	
6	Medicine Hat.	1906	138	11	12.54	12.54
		1907	.....	.....	.....	
		1908	.....	.....	.....	
		1909	.....	.....	.....	
		1909	.....	.....	.....	
7	Nanton.....	1906	55	3	18.33	18.33
		1907	.....	.....	.....	
		1908	.....	.....	.....	
		1909	.....	.....	.....	
		1910	.....	.....	.....	

RYE.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
8	High River.....	1906				
		1907	.....	.....	.....	
		1908	.....	.....	.....	
		1909	.....	.....	.....	
		1910	.....	.....	.....	
9	Rocky Mountain....	1906				
		1907	.....	.....	.....	
		1908	.....	.....	.....	
		1909	.....	.....	.....	
		1910	.....	.....	.....	
10	Okotoks... ..	1906				17.90
		1907	.....	.....	.....	
		1908	669	33	20 27	
		1909	924	56	16 50	
		1910	.....	.....	.....	
11	Cochrane... ..	1906				19.89
		1907	.....	.....	.....	
		1908	100	5	20 00	
		1909	1,369	47	27.01	
		1910	142	29	4.90	
12	Gleichen... ..	1906	56	2	28 00	28.00
		1907	.....	.....	.....	
		1908	.....	.....	.....	
		1909	.....	.....	.....	
		1910	.....	.....	.....	
13	Disdbury... ..	1906	1,737	55	31.58	19.54
		1907	430	19	22 63	
		1908	881	48	19.19	
		1909	1,692	69	24 51	
		1910	2,042	156	13 09	
14	Olds... ..	1906	220	14	15 71	16.21
		1907	1,292	100	12.92	
		1908	92	6	15 33	
		1909	411	23	17 87	
		1910	677	23	29.43	
15	Stettler... ..	1906	55	3	18.33	16.44
		1907	98	4	24.50	
		1908	.....	.....	.....	
		1909	179	13	13.76	
		1910	113	7	16.14	
16	Sedgewick... ..	1906				12.59
		1907	.....	.....	.....	
		1908	23	1	23.00	
		1909	144	14	10.27	
		1910	110	7	15.71	
17	Innisfail... ..	1906	329	30	10 96	17.46
		1907	542	30	18.06	
		1908	1,190	38	31.31	
		1909	976	53	18.41	
		1910	752	66	11.39	



CATTLE ON AN ALBERTA RANGE

RYE.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
18	Red Deer	1906	1,011	53	19.07	16 14
		1907	1,573	81	19.42	
		1908	1,863	126	14.78	
		1909	1,023	35	29.20	
		1910	1,132	114	9.93	
19	Lacombe	1906	381	22	17.31	19 63
		1907	2,396	98	24.45	
		1908	2,276	120	18.96	
		1909	3,328	246	14.00	
		1910	4,887	190	25.72	
20	Ponoka	1906	9,272	289	23.83	18 78
		1907	2,921	124	23.55	
		1908	10,620	626	16.96	
		1909	10,379	742	13.98	
		1910	13,887	630	22.04	
21	Wetaskiwin	1906	729	28	26.03	20.98
		1907	114	6	19.00	
		1908	272	12	22.66	
		1909	2,403	118	20.36	
		1910	616	33	18.67	
22	Leduc	1906	403	15	26.86	25.00
		1907	..	..	..	
		1908	72	4	18.00	
		1909	..	..	..	
		1910	..	..	..	
23	Camrose	1906	1,479	62	23.85	17.95
		1907	386	32	12.06	
		1908	898	46	19.52	
		1909	1,317	77	17.10	
		1910	1,233	79	15.61	
24	Alexandra	1906	..	..	..	20.36
		1907	..	..	..	
		1908	..	..	..	
		1909	224	11	20.36	
		1910	..	..	..	
25	Vermilion	1906	86	3	28.66	27 50
		1907	..	..	..	
		1908	24	1	24.00	
		1909	..	..	..	
		1910	..	..	..	
26	Vegreville	1906	504	29	17.37	15 69
		1907	..	..	..	
		1908	927	56	16.55	
		1909	212	8	26.50	
		1910	453	47	9.63	
27	Strathcona	1906	110	10	11.00	11.00
		1907	..	..	..	
		1908	..	..	..	
		1909	..	..	..	
		1910	..	..	..	

Rye.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
28	Stony Plain.	1906	..	..	..	7.00
		1907	58	13	4.46	
		1908	..	..	..	
		1909	68	5	13.60	
		1910	..	..	..	
29	Lac Ste. Anne	1906	..	..	..	
		1907	..	..	..	
		1908	..	..	..	
		1909	..	..	..	
		1910	..	..	..	
30	Pembina..	1906	..	..	..	
		1907	..	..	..	
		1908	..	..	..	
		1909	..	..	..	
		1910	..	..	..	
31	St. Albert. .	1906	..	..	..	
		1907	..	..	..	
		1908	..	..	..	
		1909	..	..	..	
		1910	..	..	..	
32	Sturgeon. .	1906	..	..	..	20.57
		1907	..	..	..	
		1908	132	8	16.50	
		1909	..	..	..	
		1910	341	15	22.75	
33	Victoria .	1906	1,047	54	19.38	17.62
		1907	..	..	..	
		1908	453	21	21.57	
		1909	711	45	15.80	
		1910	503	34	14.79	
34	Pakan....	1906	387	25	15.48	17.72
		1907	..	..	..	
		1908	84	3	28.00	
		1909	364	16	22.75	
		1910	972	58	16.76	
35	Athabasca..	1906	..	..	..	..
		1907	..	..	..	
		1908	..	..	..	
		1909	..	..	..	
		1910	..	..	..	

SPELTZ.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston.. . . .	1906	..	..	..	13.25
		1907	..	..	..	
		1908	356	31	11.48	
		1909	214	12	17.83	
		1910	..	..	..	

SPELTZ.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
2	Macleod	1906				
		1907				
		1908				
		1909				
		1910				
3	Lethbridge	1906	1,015	59	17 20	18.75
		1907	418	10	41.80	
		1908	670	44	15 22	
		1909	109	5	20.80	
		1910				
4	Pincher Creek	1906				46 38
		1907				
		1908	34	1	34.00	
		1909	569	12	46 75	
		1910				
5	Claresholm.	1906	2,167	80	27.08	20.30
		1907	695	36	19.30	
		1908	2,798	160	17.48	
		1909	836	44	19.00	
		1910				
6	Medicine Hat	1906	811	25	32.44	33.03
		1907	5	1	5.00	
		1908	10	3	3.33	
		1909	933	29	32.16	
		1910				
7	Nanton	1906	586	18	31.44	25 79
		1907	136	10	13 60	
		1908				
		1909				
		1910				
8	High River	1906	576	15	38 40	38.40
		1907				
		1908				
		1909				
		1910				
9	Rocky Mountain.	1906				
		1907				
		1908				
		1909				
		1910				
10	Okotoks.	1906	413	26	15.88	15.88
		1907				
		1908				
		1909				
		1910				
11	Cochrane	1906				20.00
		1907				
		1908				
		1909	420	21	20.00	
		1910				

SPELTZ.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
12	Gleichen...	1906				35.43
		1907	.. ..	.. ..	.....	
		1908	2,513	69	36.42	
		1909	.. ..	.....	.....	
		1910	38	3	12.66	
13	Didsbury...	1906	565	16	35.31	22.05
		1907	.. ..	.....	.....	
		1908	564	38	14.84	
		1909	718	22	32.63	
		1910	94	12	7.83	
14	Olds.	1906	314	10	31.40	24.21
		1907	.. ..	.....	.....	
		1908	514	22	24.59	
		1909	162	10	16.20	
		1910	.. ..	.....	.....	
15	Stettler.....	1906	460	10	46.00	25.42
		1907	1,082	45	24.04	
		1908	163	3	54.32	
		1909	761	39	19.33	
		1910	.. ..	.....	.....	
16	Sedgewick.....	1906				18.51
		1907	342	17	20.11	
		1908	356	32	11.12	
		1909	738	28	26.35	
		1910	26	2	13.00	
17	Innisfail.....	1906				
		1907	.. ..	.....	.....	
		1908	.. ..	.....	.....	
		1909	.. ..	.....	.....	
		1910	.. ..	.....	.....	
18	Red Deer....	1906	15	1	15.00	15.00
		1907	.. ..	.....	.....	
		1908	.. ..	.....	.....	
		1909	.. ..	.....	.....	
		1910	.. ..	.....	.....	
19	Lacombe... ..	1906	56	2	28.00	28.00
		1907	.. ..	.....	.....	
		1908	.. ..	.....	.....	
		1909	.. ..	.....	.....	
		1910	.. ..	.....	.....	
20	Ponoka.....	1906	187	8	23.38	23.38
		1907	.. ..	.....	.....	
		1908	.. ..	.....	.....	
		1909	.. ..	.....	.....	
		1910	.. ..	.....	.....	
21	Wetaskiwin.....	1906	1,028	32	32.12	34.00
		1907	100	2	50.00	
		1908	96	2	48.00	
		1909	.. ..	.....	.....	
		1910	.. ..	.....	.....	

SPELTZ.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
22	Leduc..	1906	54	3	18 00	25.62
		1907	..	..	..	
		1908	224	7	32.00	
		1909	55	3	18.33	
		1910	..	..	..	
23	Camrose...	1906	549	23	19 10	21.77
		1907	300	16	18 75	
		1908	..	..	..	
		1909	..	..	..	
		1910	..	..	..	
24	Alexandra...	1906	..	..	..	
		1907	..	..	..	
		1908	..	..	..	
		1909	..	..	..	
		1910	..	..	..	
25	Vermilion.	1906	36	1	36 00	21.00
		1907	..	..	..	
		1908	129	7	18.42	
		1909	150	7	21.42	
		1910	..	..	..	
26	Vegreville... ..	1906	883	29	30 44	24.63
		1907	284	15	18.92	
		1908	360	10	36.00	
		1909	542	30	18.06	
		1910	..	..	..	
27	Stratheona.....	1906	..	..	..	
		1907	..	..	..	
		1908	..	..	..	
		1909	..	..	..	
		1910	..	..	..	
28	Stony Plain....	1906	..	..	..	
		1907	..	..	..	
		1908	..	..	..	
		1909	..	..	..	
		1910	..	..	..	
29	Lac Ste. Anne....	1906	..	..	..	26 00
		1907	..	..	..	
		1908	26	1	26.00	
		1909	..	..	..	
		1910	..	..	..	
30	Pembina.....	1906	..	..	..	
		1907	..	..	..	
		1908	..	..	..	
		1909	..	..	..	
		1910	..	..	..	
31	St. Albert.....	1906	..	..	..	
		1907	..	..	..	
		1908	..	..	..	
		1909	..	..	..	
		1910	..	..	..	

SFELTZ.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
32	Sturgeon	1906	.	.	.	
		1907	.	.	.	
		1908	.	.	.	
		1909	.	.	.	
		1910	.	.	.	
33	Victoria	1906	144	5	28 80	
		1907	.	.	.	
		1908	.	.	.	
		1909	170	7	24.29	
		1910	.	.	.	
34	Pakan	1906	.	.	.	15.00
		1907	.	.	.	
		1908	15	1	15.00	
		1909	.	.	.	
		1910	.	.	.	
35	Athabasca.....	1906	.	.	.	
		1907	.	.	.	
		1908	.	.	.	
		1909	.	.	.	
		1910	.	.	.	

SUMMARY OF THE ACREAGE AND YIELDS OF THE LEADING GRAINS DURING THE LAST TWELVE YEARS.

	YEAR	Crop area in acres	Total yields in bushels	Average yield per acre	Average yield
Spring Wheat.....	1910	450,493	5,697,956	12.65	17.64
	1909	324,472	6,155,455	18 97	
	1908	212,677	4,001,504	18 81	
	1907	123,935	2,261,610	18.25	
	1906	115,502	2,664,661	23.07	
	1905	75,353	1,617,505	21.46	
	1904	47,411	786,075	16.58	
	1903	59,951	1,118,180	18.65	
	1902	45,064	850,122	18.86	
	1901	34,890	857,714	24.58	
	1900	30,361	583,806	19.22	
	1899	35,090	833,123	23.74	
Winter Wheat.	1910	142,467	2,206,564	15.48	21.46
	1909	102,167	2,312,344	22 63	
	1908	104,956	3,093,422	29.47	
	1907	83,965	1,932,925	20 66	
	1906	61,625	1,301,359	21.11	
	1905	32,174	689,019	21.41	
	1904	8,296	152,125	18.33	
	1903	3,440	82,418	23.95	

SUMMARY OF THE ACREAGE AND YIELDS OF THE LEADING GRAINS DURING THE
LAST TWELVE YEARS—*Continued.*

	YEAR	Crop area in acres	Total yields in bushels	Average yield per acre	Average yield
Oats	1910	492,589	12,158,530	24.68	33.90
	1909	693,901	24,819,661	35.76	
	1908	431,145	15,922,974	36.93	
	1907	307,093	9,247,914	30.11	
	1906	335,728	13,136,913	39.12	
	1905	242,801	9,514,180	39.18	
	1904	180,698	5,609,496	31.04	
	1903	162,314	5,187,511	31.95	
	1902	118,997	3,776,976	31.74	
	1901	104,533	4,253,284	40.68	
	1900	77,616	2,625,581	33.82	
	1899	51,929	2,189,441	42.16	
Barley..	1910	90,901	1,889,509	20.79	25.88
	1909	107,764	3,310,332	30.72	
	1908	77,876	1,949,164	25.03	
	1907	54,698	1,082,460	19.78	
	1906	73,588	2,157,957	29.32	
	1905	64,830	1,773,914	27.36	
	1904	61,549	1,608,241	26.12	
	1903	42,219	1,077,274	25.51	
	1902	22,201	473,108	21.31	
	1901	13,483	442,381	32.81	
	1900	9,256	234,971	25.37	
	1899	6,655	178,395	26.80	
Flax....	1910	15,271	46,155	3.02	7.41
	1909	12,479	131,531	10.54	
	1908	9,262	73,762	7.96	
	1907	6,488	50,002	7.87	
	1906	3,647	38,491	10.65	
	1905	581	8,337	14.34	
	1904	367	5,003	13.63	
	1903	830	7,753	9.34	
	1902	373	4,476	12.00	
	1901	1,522	28,306	18.60	
Rye..	1909	1,592	25,801	16.20	18.01
	1908	1,250	22,625	18.10	
	1907	591	10,595	17.91	
	1906	1,139	22,462	19.70	
	1905	18	164	9.11	
Speltz....	1909	269	6,369	23.67	23.70
	1908	484	9,697	20.03	
	1907	151	3,346	22.15	
	1906	385	11,423	29.67	
	1905	178	4,419	24.82	
	1904	112	2,426	21.66	
	1903	112	2,426	21.66	

	Total crop area	Total yield of grain
1910..	1,193,261	22,027,184
1909..	1,242,644	36,761,493
1908..	837,641	25,073,147
1907..	576,821	14,588,852
1906..	591,614	19,333,266
1905..	415,917	13,607,374
1904..	298,433	8,163,366

III.—MUSEUM.

As in previous years the Department has availed itself of every opportunity to secure creditable specimens of heads, or rare birds for museum purposes.

The principal acquisition during 1910 was the securing of the head, hide and hoofs of one of the wood bison which ranges the country lying directly west of Fort Smith on the northern boundary of the province, being in latitude 60. This specimen was obtained by Harry V. Radford who obtained a permit for one pair, with the understanding that he was to furnish the Alberta Government with a specimen for museum purposes. From measurements and weight, taken by Mr. Radford, it appears to be the largest animal of its kind ever taken, at least as far as there is any record. The weight given by Mr. Radford is 2,402 lbs.

Height at shoulder	5 feet 10 inches
Girth behind forelegs	9 feet 9 inches
Length of head and body	9 feet 7 inches
Length of tail vertebrae	1 foot 7½ inches
Circumference of muzzle behind nostrils	2 feet 3¼ inches

This specimen has been well preserved, and will be mounted as a whole specimen of the wood bison for placing later in the provincial museum.

The department was also successful in obtaining a deer head and the head of a mountain sheep, as well as a few sharp-tailed grouse.

IV.—FRUIT EXPERIMENT STATIONS.

The work of the fruit experiment stations was continued during the year. Towards the close of the season all the stations were visited by Mr. H. A. Craig, Superintendent of Fairs and Institutes. The following is his report:

About seventy-five per cent. of the trees are alive and about half of them are in a good strong condition. Three of the orchards are in a state of good cultivation with the result that they show a very decided improvement over those not so well taken care of. It is significant that those which are free from weeds have less damage from implements, horses and other domestic animals.

The orchard at Granum is in a very bad condition indeed. The man who had charge of this work sold his farm. Of the eighty-trees which were originally planted there are eight or ten growing, but in a very weak condition. The orchard was never fenced, consequently the farm animals have destroyed practically all the trees. It will be of no more use to the Department for experimental purposes.

I find that the lack of proper fencing is responsible for much of the damage to all the orchards. Horses, cattle, sheep and hogs have free access to most of them. In the southern portion of the province it is evident that the cotton tail rabbit is returning. In the De Winton orchard several of the trees have already been barked. Strong winds have caused much damage, breaking a number of the trees, and as well having the effect of drying them out. I find the best results in the orchards protected by good wide thick shelter belts.

From what I have been able to learn so far I am convinced that there are three things which are essential to success:

1. Hardy stock.
2. Protection
 - (a) From animals;
 - (b) By shelter belt;
 - (c) By wrapping in winter.
3. Good cultivation to conserve moisture.

The following varieties of apple trees are doing very well: Wealthy, Charamoff, Hibernial. The other varieties have not done particularly well, especially is this the case with the Duchess and Wismer's Dessert. The crab apple trees are all in good condition, a number of them showing fruit spurs.

Plums and cheeries are not strong. The Desota and native plums are giving fair promise however.

If this work is to be carried on, I beg to make the following recommendations:

1. That the orchard at Granum be abandoned.
2. That these orchards be surrounded with a good woven wire fence with proper gates. If this fence will not stop rabbits, that poultry netting be attached also.
3. That the dead trees be replaced, not necessarily with those of the same variety.
4. That trees for a shelter belt be secured where such is not already in place or where the belt is not sufficient.

V.—VITAL STATISTICS.

In submitting the following figures and tables it might be mentioned that although great care has been taken in the collection and compilation of returns it is felt that they are not as complete as might be desired. There are reasons for this that are legitimate, notably, the ever increasing influx of immigration to this province from all parts of the world speaking almost every known tongue. To bring these people at once to the knowledge of all our laws is impossible. To overcome this difficulty in connection with the Vital Statistics Act, the Department has posters for distribution printed in four different languages, stating the requirements of the Act. A number of these have been supplied to each postmaster in the province. Also postmasters are, wherever possible, appointed as registrars of vital statistics for the district tributary to their offices, as they are able to keep watch on events occurring, and in the foreign settlements are usually able to converse with the people in the language predominating in the district.

It is doubtful if language is the chief source of embarrassment and perplexity, for parents and other persons responsible are surprisingly negligent in the matter of registering births and deaths and not until they require official evidence that such an event has taken place, do they realize what trouble a little carelessness in this connection can put them to. This fact is brought to the notice of the Department almost daily. Then again, as two years are allowed in which to register events of this kind without payment of fee, registrations are often indefinitely postponed and ultimately forgotten. For instance, the number of births on file at the time of writing for 1910, is 8,231 and although showing a big increase over figures for preceding year, this number will be augmented by at least 2,000 during the next twelve months.

Regarding the growth of this work and the efforts of the Department to cope with it, should be stated that whereas in 1906 there were only 14 registrars, there are at present 669. Appended will be found figures showing the increase in returns during that time.

In the year 1910, 142 new appointments were made and 72 resignations accepted and reappointments made, and five offices were closed.

BIRTHS.

The total number of birth registrations received for the year 1910 is 8,231, an increase of 20.30 per cent. over last year. The masculinity of the births or the number of males to each 1,000 female births is 1,065.

MARRIAGES.

The total number of marriage registrations received for 1910 is 3,086 as compared with 2,032 received for 1909. The mean marriage age in 1910 is shown for males, 28.72, and for females 24.18. The youngest bride was 13 years old and the oldest 71 years. The youngest bridegroom was 17 years of age and the oldest 74 years.

DEATHS.

The total number of death registrations received for the past year was 3,526, or 2,055 males and 1,471 females, showing a total increase of 864, or an increase of 496 male and 368 female deaths, being equivalent to a death ratio of 1 to 2.69 births. Deaths among infants under one year of age occurred to the number of 1,066. Compared with 8,231 registered births means practically that for every 8 children born there was the death of one infant under the age of 12 months.

TOTAL REGISTRATIONS received of all Births, Marriages and Deaths for each respective month of the year 1910.

MONTH	BIRTHS	MARRIAGES	DEATHS
January	659	234	228
February	603	242	207
March	729	188	262
April	660	223	259
May	772	212	286
June	710	362	282
July	694	247	339
August	715	237	481
September	689	238	341
October	711	271	286
November	652	325	258
December	637	307	297
Totals	8,231	3,086	3,526

VITAL STATISTICS RETURNS, 1905 TO 1910 (INCLUSIVE).

YEAR	BIRTHS	MARRIAGES	DEATHS	TOTAL
1905	421	187	114	722
1906	3,033	927	1,091	5,051
1907	4,732	1,907	1,578	8,217
1908	5,973	2,032	2,188	10,193
1909	6,897	2,384	2,662	11,943
1910	8,231	3,086	3,526	14,843
Total	29,287	10,523	11,159	50,969

CERTIFIED EXTRACTS, SEARCHES AND AUTHORITIES TO REGISTER, 1910:

180 Certified Extracts.
105 Authorities to Register.
31 Searches of Records.

REGISTRATIONS received from Registrars throughout the respective Electoral Districts, 1910.

Births by Electoral Districts.

ELECTORAL DISTRICT	MALE	FEMALE	TOTAL
Alexandra.....	50	75	125
Athabasca..	37	46	83
Camrose.....	141	126	267
Cardston.....	64	76	140
Clareholm...	96	57	153
Cochrane....	41	35	76
Didsbury...	111	119	230
Gleichen....	51	40	91
High River...	72	61	133
Innisfail....	71	62	133
Lacombe....	49	61	110
Lac Ste. Anne....	19	27	46
Leduc.....	72	74	146
Lethbridge..	204	172	376
Macleod....	53	33	86
Medicine Hat..	196	204	400
Nanton.....	69	60	129
Ocotoks....	36	22	58
Olds.....	71	63	134
Pakan.....	191	165	356
Peace River..	16	9	25
Pembina.....	31	26	57
Pincher Creek..	35	44	79
Ponoka.....	50	39	89
Red Deer....	78	64	142
Rocky Mountain..	100	90	190
Sedgewick....	139	83	222
St. Albert....	90	118	208
Stettler....	127	124	251
Stony Plain...	61	48	109
Strathcona...	117	99	216
Sturgeon....	57	39	96
Vermilion...	155	152	307
Vegreville....	334	356	690
Victoria....	109	112	221
Wetaskiwin...	94	86	180
Calgary City...	528	514	1,042
Edmonton....	294	297	591
Lethbridge City.....	137	107	244
Totals.....	4,246	3,985	8,231

REGISTRATIONS received from Registrars throughout the respective Electoral Districts, 1910.

BIRTHS BY ELECTORAL DISTRICTS	MONTHS												Total
	January	February	March	April	May	June	July	August	September	October	November	December	
Alexandra...	9	16	16	8	7	7	10	12	9	10	10	11	125
Athabasca...	6	6	3	1	6	7	9	4	6	9	15	11	83
Camrose...	19	25	18	32	30	19	21	26	24	25	18	10	267
Cardston...	13	10	10	10	10	10	13	16	9	17	12	10	140
Clareholm...	11	10	14	8	20	9	10	18	21	13	12	7	153
Cochrane...	4	3	3	11	12	4	5	6	3	10	9	6	76
Didsbury...	18	10	12	18	29	28	16	20	28	19	19	13	230
Gleichen...	3	5	6	4	11	4	12	13	4	12	11	6	91
High River...	7	8	17	11	20	15	9	15	7	8	6	10	133
Innisfail...	10	13	11	2	12	10	10	20	10	12	6	17	133
Lacombe...	11	5	9	9	22	12	9	12	7	5	3	6	110
Lac Ste. Anne.	9	4		3	4	3	5	3	3	2	6	4	46
Leduc...	9	9	13	14	6	16	19	13	8	11	18	10	146
Lethbridge...	35	37	44	22	40	37	17	39	27	30	22	26	376
Macleod...	8	10	10	7	5	5	8	3	9	5	5	11	86
Medicine Hat.	30	19	37	30	42	40	32	31	38	34	32	35	400
Nanton...	7	7	7	11	11	14	12	11	16	13	11	9	129
Okotoks...	3	7	4	3	8	5	3	3	7	6	3	6	58
Olds...	11	11	14	8	13	13	13	5	10	9	10	17	134
Pakan...	46	29	24	28	23	37	27	31	26	24	30	31	356
Peace River...	1	1	3	2	2	2	4	1	4	1	1	3	25
Pembina...	3	4	2	5	11	6	3	3	5	8	4	3	57
Pincher Creek.	4	9	9	6	6	3	6	6	8	10	3	9	79
Ponoka...	8	12	10	9	5	10	3	2	9	10	5	6	89
Red Deer...	8	6	8	13	7	12	12	14	23	23	3	13	142
Rocky Mount'n	27	14	17	14	24	14	24	10	10	10	12	13	190
Sedgewick...	20	18	28	13	19	11	17	20	17	24	16	19	222
St. Albert...	16	20	23	18	22	14	14	20	10	15	19	17	208
Stettler...	19	22	21	18	22	26	14	25	21	23	20	20	251
Stony Plain...	12	7	10	16	14	4	9	10	5	5	8	9	109
Strathcona...	14	15	25	14	18	32	18	20	9	22	14	15	216
Sturgeon...	6	6	6	10	5	13	4	5	10	10	13	8	96
Vermilion...	31	19	22	28	26	27	22	23	22	33	31	23	307
Vegreville...	69	52	62	65	62	60	57	70	53	43	60	37	690
Victoria...	18	21	27	17	15	20	23	12	26	21	12	9	221
Wetaskiwin...	15	13	22	16	19	10	15	18	25	12	10	5	180
Calgary City...	65	70	80	94	84	94	101	90	87	94	89	94	1,042
Edmonton...	41	40	56	47	65	45	63	47	52	45	47	43	591
Lethbridge City	13	10	26	15	15	12	25	18	21	28	26	35	244
Total.....	659	602	729	660	772	710	694	715	689	711	652	637	8,231

ANNUAL REPORT, 1910

MARRIAGES BY DENOMINATIONS AND AGES.—ELECTORAL DISTRICTS, 1910.

RELIGIOUS DENOMINATIONS OF GROOM AND BRIDE.																	AGES.														
SEX	RELIGIOUS DENOMINATIONS OF GROOM AND BRIDE.																	ELECTORAL DISTRICTS	AGES.												
	Presbyterian	Methodist	Anglican	Roman Catholic	Lutheran	Baptist	Greek Catholic	Latter Day Saints	Mormons	Evangelical Rfd	Mennonite	Salvation Army	Congregationalist	Gr. (Ortho. & Ind.	Others	Not Stated															
Males	10	6	13	3	3	2	1	1	1	1	1	1	1	1	1	1	40	Alexandra—	Under 16	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 60	Over 60	40		
Females	10	7	14	2	2	2	1	1	1	1	1	1	1	1	1	1	40		...	4	16	10	6	4	3	1	1	1	1	40	
Total	20	13	27	5	5	4	2	2	2	2	2	2	2	2	2	2	80		—	4	24	33	10	6	3	1	1	1	1	80	
Males	...	...	...	14	14	...	...	...	...	...	...	...	...	...	...	...	14	Athabasca—	...	3	4	2	1	1	2	1	2	1	1	14	
Females	...	...	...	14	14	...	...	...	...	...	...	...	...	...	...	...	14		2	6	2	1	1	1	1	1	1	1	1	14	
Total	...	...	...	28	28	...	...	...	...	...	...	...	...	...	...	...	28		2	9	6	3	1	1	3	1	2	1	1	28	
Males	5	15	3	20	28	5	2	2	2	2	1	1	1	1	2	2	84	Camrose—	...	3	27	35	13	2	2	2	2	2	2	184	
Females	7	12	6	22	32	2	1	1	1	1	1	1	1	1	1	1	84		1	36	26	16	2	1	2	1	1	1	84		
Total	12	27	9	42	60	7	2	2	2	2	1	1	1	1	2	2	168		1	30	51	15	4	3	3	3	2	2	2	168	
Males	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	24	Cardston—	...	4	7	4	5	1	1	2	1	1	1	24	
Females	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	24		...	5	14	1	1	1	1	1	1	1	1	24	
Total	6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	48		...	9	21	4	6	1	2	3	2	2	2	48	

MARRIAGES BY DENOMINATIONS AND AGES.—ELECTORAL DISTRICTS, 1910.—Continued.

RELIGIOUS DENOMINATIONS OF GROOM AND BRIDE.																	AGES.												
SEX	RELIGIOUS DENOMINATIONS OF GROOM AND BRIDE.																ELECTORAL DISTRICTS	AGES.											
	Presbyterian	Methodist	Anglican	Roman Catholic	Lutheran	Baptist	Greek Catholic	Latter Day Saints	Moravians	Evangelical R'fd.	Mennonite	Salvation Army	Congregationalist	Gr. Ortho. & Ind.	Others	Not Stated													
Males.....	6	16	2	1	4	1	1	2	1	1	1	1	1	1	1	35	Claresholm—	Under 16	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 60	Over 60	35	
Females.....	5	11	3	1	7	5	1	1	1	1	1	1	1	2	2	35		18 to 10	2	3	2	5	2	1	1	1	1	1	35
Total	11	27	5	2	11	6	3	3	1	1	1	1	1	3	3	70		20	21	14	4	7	2	1	1	1	1	70	
Males.....	4	9	3	1	1	1	1	1	1	1	1	1	1	1	1	20	Cochrane—	1	8	8	2	1	1	1	1	1	1	20	
Females.....	3	8	3	2	1	1	1	1	1	1	1	1	1	2	2	20		4	10	4	2	2	1	1	1	1	1	1	20
Total.....	7	17	6	3	1	1	1	1	1	1	1	1	1	3	1	40		5	18	12	4	1	1	1	1	1	1	40	
Males.....	14	7	2	1	2	3	1	1	1	7	7	1	1	3	1	48	Didsbury—	2	13	17	8	2	2	2	4	2	2	48	
Females.....	11	8	4	3	4	6	1	1	4	5	5	1	1	2	1	48		18	15	10	2	2	2	1	1	1	1	1	48
Total.....	25	15	6	4	6	9	1	1	11	12	1	1	1	5	2	96		20	28	27	10	4	4	4	4	3	3	96	
Males.....	6	5	8	10	3	2	1	1	1	1	1	1	2	1	1	38	Gleichen—	2	10	15	6	3	1	1	1	1	1	38	
Females.....	9	6	9	8	3	1	1	1	1	1	1	1	1	1	1	38		14	13	6	2	1	1	1	1	1	1	1	38
Total.....	15	11	17	18	6	2	1	1	1	1	1	1	2	2	2	76		16	23	21	8	4	2	2	2	2	2	76	

MARRIAGES BY DENOMINATIONS AND AGES.—ELECTORAL DISTRICTS, 1910.—Continued.

RELIGIOUS DENOMINATIONS OF GROOM AND BRIDE.																	AGES.														
SEX	RELIGIOUS DENOMINATIONS OF GROOM AND BRIDE.																	ELECTORAL DISTRICTS	AGES.												
	Presbyterian	Methodist	Anglican	Roman Catholic	Lutheran	Baptist	Greek Catholic	Latter Day Saints	Moravians	Evangelical Rfd	Mennonite	Salvation Army	Congregationalist	Gr. Ortho. & Ind.	Others	Not Stated															
Males.....	3	11	3	4	5	..	..	..	..	..	..	..	..	..	4	5	35	Nanton—	Under 16	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 60	Over 60	35		
Females ..	10	10	1	1	3	2	..	..	..	..	..	..	..	..	5	3	35	..	..	15	10	11	12	1	1	1	..	..	..	35	
Total.....	23	21	4	1	7	7	..	..	..	..	..	..	..	..	9	8	70	..	..	17	24	16	4	5	2	2	..	..	..	70	
Males.....	3	3	3	..	..	1	..	..	1	..	..	..	..	..	3	..	13	Okotoks—	..	6	3	3	..	5	..	..	1	..	..	13	
Females.....	6	2	3	..	..	1	..	..	..	..	..	..	..	..	..	..	13	..	..	..	3	4	..	..	..	..	1	..	..	13	
Total.....	9	5	6	..	..	1	..	..	1	1	..	..	..	..	3	..	26	..	..	6	6	7	5	..	..	..	2	..	..	26	
Males.....	6	6	6	3	5	4	..	..	..	..	3	..	..	..	2	..	35	Olds—	..	..	18	11	6	..	..	..	..	..	..	..	35
Females ..	7	7	5	2	6	1	..	..	..	1	3	1	..	..	2	..	35	..	..	9	13	8	3	..	..	..	..	..	..	..	35
Total.....	13	13	11	5	11	5	..	..	..	1	6	1	..	..	4	..	70	..	..	..	31	19	9	..	..	..	..	..	..	..	70
Males.....	2	4	5	36	1	8	..	..	..	..	..	1	..	1	..	..	58	Pakan—	..	7	34	8	4	4	1	..	..	..	..	..	58
Females.....	1	3	6	35	1	8	..	..	..	..	..	4	..	..	..	..	58	..	5	30	10	2	1	..	..	..	..	..	..	..	58
Total.....	3	7	11	71	2	16	..	..	..	..	..	1	4	1	..	..	116	..	5	37	44	18	6	5	1	..	..	..	..	..	116

MARRIAGES BY DENOMINATIONS AND AGES.—ELECTORAL DISTRICTS, 1910.—Continued.

SEX	RELIGIOUS DENOMINATIONS OF GROOM AND BRIDE.														ELECTORAL DISTRICTS	AGES.													
																Under 16	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 60	Over 60				
	Presbyterian	Methodist	Anglican	Roman Catholic	Lutheran	Baptist	Greek Catholic	Latter Day Saints	Moravians	Evangelical Rfid	Mennonite	Salvation Army	Congregationalist	Gr. Ortho. & Ind.												Others	Not Stated		
Males...	18	20	10	16	8	3	1	2	1	1	1	1	1	1	4	8	91	Stettler—	33	32	43	15	10	10	4	2	1	1	91
Females.	15	24	7	15	11	6	2	1	1	1	1	1	1	1	5	3	91		40	26	11	5	5	2	1	1	1	1	91
Total.	33	44	17	31	19	9	3	3	1	1	1	1	1	1	9	11	182		40	59	43	15	15	2	4	3	1	1	182
Males ..	.	.	2	13	.	.	.	.	.	5	.	.	.	.	4	4	24	Stony Plain—	2	11	4	3	1	1	1	3	1	1	24
Females .	.	.	2	17	.	.	.	.	.	3	.	.	.	.	1	1	24		15	4	3	..	..	..	1	1	1	1	24
Total.	.	.	4	1	30	..	..	..	..	8	.	..	..	..	5	5	48		17	15	7	3	1	1	1	4	1	1	48
Males..	15	7	9	5	11	6	1	1	2	1	1	1	1	1	3	3	61	Strathcona—	19	21	19	10	5	5	1	2	3	1	61
Females	22	9	5	4	10	4	1	1	3	1	1	1	1	1	1	1	61		19	22	10	5	1	2	1	1	1	1	61
Total	37	16	14	9	21	10	2	2	5	1	1	1	1	1	4	4	122		19	43	29	15	6	3	3	4	4	1	122
Males...	2	1	1	8	1	1	5	.	.	.	.	.	.	.	.	.	18	Sturgeon—	4	8	4	2	2	2	1	1	1	1	18
Females.	1	1	1	9	1	1	4	.	.	2	.	.	.	.	.	.	18		4	10	2	2	..	..	..	..	..	..	18
Total.	3	1	2	17	1	1	9	1	9	2	2	2	2	2	2	2	36		4	18	6	4	2	1	1	1	1	1	36

Males	20	10	10'	5	2	7	12	..	.	.	.	1	2	..	1	70	Vermilion—
Females	13	9	9	12	5	5	8	2	.	..	..	1	4	1	1	70	
Total.	33	19	19	17	7	12	20	2	..	..	..	2	6	1	2	140	
Males...	9	1	3	27	10	2	103	..	..	..	..	1	30	2	..	188	Vegreville—
Females	12	5	3	39	8	3	67	..	..	..	..	46	3	2	..	188	
Total.	21	6	6	66	18	5	170	..	..	..	..	76	5	2	376		
Males...	3	..	3	8	5	..	29	..	..	..	..	17	2	..	67	Victoria—	
Females	3	6	2	11	..	1	23	..	2	..	..	16	3	..	67		
Total..	6	6	5	19	5	1	52	..	2	..	..	33	5	..	134		
Males...	10	13	6	7	25	5	..	..	5	..	..	1	..	3	1	76	Wetaskiwin—
Females	12	15	8	4	28	5	..	..	..	..	..	1	..	3	..	76	
Total.	22	28	14	11	53	10	..	..	..	5	..	2	..	6	1	152	
Males...	210	174	175	42	38	49	..	..	3	5	..	4	5	1	22	7	Calgary City—
Females	194	151	179	61	42	49	1	2	4	5	1	4	15	13	14	735	
Total	404	325	354	103	80	98	1	2	7	10	1	8	20	1	35	21	
Males...	123	59	82	42	30	30	10	..	..	..	..	1	4	2	6	6	Edmonton City—
Females	96	67	72	61	34	35	6	..	1	..	..	6	1	13	3	395	
Total	219	126	154	103	64	65	16	..	..	..	..	1	10	3	19	9	
Males...	50	39	45	37	14	13	3	2	..	..	..	2	1	..	7	5	Lethbridge City—
Females	48	35	41	43	13	17	4	3	..	..	..	1	5	..	5	3	
Total	98	74	86	80	27	30	7	5	..	..	..	3	6	..	12	8	
																436	

DEPARTMENT OF AGRICULTURE

MARRIAGES—Religious Denominations of Contracting Parties.

		DENOMINATIONS	BRIDEGROOMS.														Total Brides	Total Bridegrooms	
			Presbyterian	Methodist	Anglican	Roman Catholic	Lutheran	Baptist	Greek Catholic	Latter Day Saints	Moravians	Evangelical R'fd	Mennonite	Salvation Army	Congregationalist	Gr. Ortho. & Ind.			Others	Not Stated
828	639	Presbyterians	435	66	73	12	7	25	..	3	..	1	..	..	5	..	7	5	639
785	538	Methodists	82	325	44	17	16	24	..	2	..	1	..	..	2	..	18	4	538
437	502	Anglicans	66	53	317	10	9	21	..	..	..	1	..	..	7	..	10	7	502
348	462	Roman Catholics	22	23	17	331	8	7	39	..	..	..	..	..	1	6	4	3	462
154	299	Lutherans	19	20	16	4	208	14	..	2	2	3	1	..	1	..	5	4	299
212	185	Baptists	28	34	18	6	13	74	..	1	1	1	1	..	3	..	3	2	185
116	150	Greek Catholics	1	..	1	5	2	..	131	..	..	..	..	..	..	10	..	..	150
39	44	Latter Day Saints	..	..	1	1	..	1	..	37	3	..	..	..	..	..	1	3	44
12	7	Moravians	..	1	..	..	3	..	..	1	..	22	..	..	..	..	..	..	7
22	26	Evangelical Reformed.	..	1	..	..	3	..	..	..	..	..	9	1	..	..	..	..	26
9	12	Mennonite	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	12
5	8	Salvation Army	..	2	..	..	..	..	..	..	..	..	6	..	..	..	..	..	8
9	42	Congregationalists	11	10	6	1	1	1	..	..	..	1	..	..	6	37	4	1	42
82	44	Greek Orthodox and Independent	..	..	..	..	..	..	7	..	..	..	..	..	..	..	..	..	44
27	85	Others	9	17	6	2	1	5	1	2	..	1	1	1	..	..	42	..	85
1	43	Not Stated	4	1	..	3	..	1	1	..	..	..	..	..	..	..	..	31	43
3,086	3,086		677	555	499	392	271	173	178	48	7	31	12	11	24	53	95	60	3,086

MARRIAGES—Origin of Contracting Parties.

BRIDEGROOMS.													
	BRIDES	English Speaking Countries					Others						
		Canada	United Kingdom	United States	Other British Colonies	Totals	Germany	Russia	Austria	Norway, Sweden and Denmark	France	Others	Total
English Speaking Countries	Canada	628	157	156	2	943	4	4	6	4	1	7	969
	United Kingdom	132	492	64	3	691	2	1	1	9	1	8	713
	United States	202	75	413	.	690	12	10	3	29	3	5	752
	Other British	1	4	3	2	10	.	.	.	.	.	.	10
	Total	963	728	636	7	2,334	18	15	10	42	5	20	2,444
Others	Germany	3	4	6	.	13	17	3	2	.	.	1	36
	Russia	4	4	5	.	13	4	95	20	2	.	1	135
	Austria	9	2	9	.	20	5	6	275	2	.	.	308
	Norway, Sweden and Denmark	14	8	20	1	43	1	.	.	60	.	.	104
	France	2	1	1	.	4	.	.	2	15	2	23	36
	Others	2	1	5	.	8	.	.	2	.	26	3	33
Total		997	748	682	8	2,435	45	119	309	108	20	50	3,086

DENOMINATIONS OF OFFICIATING CLERGYMEN.

Presbyterian	828
Methodist	785
Anglican	437
Roman Catholic	348
Lutheran	154
Baptist	212
Greek Catholic	116
Latter Day Saints	39
Evangelical Reformed	22
Moravian	12
Mennonite	9
Salvation Army	5
Congregationalist	9
Greek Orthodox and Independent	82
Others	27
Not stated	1
Total	3,086

MEAN MARRIAGE AGE.

YEAR	MALE	FEMALE	YEAR	MALE	FEMALE
1901	28 78	22 42	1906	28 82	22 59
1902	27 10	22 88	1907	27 45	23 98
1903	28 31	22 98	1908	30 23	24 19
1904	28 53	23 41	1909	28 94	24 22
1905	28 34	23 06	1910	28 72	24 18

BIRTHS AND RATIO OF BIRTHS TO DEATHS.

YEAR	Births of males to 1,000 births of females	Ratio of Births to Deaths	YEAR	Births of males to 1,000 births of females	Ratio of Births to Deaths
1901	1,081	3 55	1906	1,094	2.07
1902	1,010	2.59	1907	1,075	2.96
1903	1,056	2.95	1908	1,077	2.73
1904	1,118	3 04	1909	1,086	2 59
1905	1,059	3.11	1910	1,065	2 69

DEATHS OF INFANTS, UNDER ONE YEAR.

To 1,000 births 1910.	129 49
To 1,000 deaths from all causes 1910...	299 48

REGISTRATIONS RECEIVED FROM REGISTRARS THROUGHOUT THE RESPECTIVE ELECTORAL DISTRICTS, 1910.

DEATHS BY ELECTORAL DISTRICTS				UNDER ONE YEAR	
Electoral District	Male	Female	Total	Male	Female
Alexandra.	28	19	47	9	4
Athabasca.	12	15	27	1	2
Camrose...	37	25	62	14	6
Cadston...	20	13	33	5	3
Claresholm.	39	21	60	11	4
Cochrane...	18	10	28	7	2
Didsbury .	43	47	90	8	11
Gleichen .	30	27	57	7	7
High River.	34	13	47	10	5
Innisfail. .	20	12	32	4	3
Lacombe.	20	18	38	5	7
Lac Ste. Anne	46	5	51	3	.
Leduc . . .	16	24	40	6	7
Lethbridge. .	61	42	103	23	17
Macleod . . .	27	8	35	6	2
Medicine Hat.	130	91	221	43	29
Nanton . . .	23	25	48	6	14
Okotoks. . .	11	3	14	2	.
Olds.....	29	20	49	7	2
Pakan.	67	72	139	28	29
Peace River.	9	8	17	2	3
Pembina . . .	4	7	11	2	3
Pincher Creek..	29	22	51	9	9
Ponoka.....	20	12	32	10	3
Red Deer. . .	47	28	75	7	8
Rocky Mountain	104	33	137	14	13
Sedgewick. . .	34	20	54	11	5
St Albert. . .	24	25	49	9	13
Stettler . . .	53	22	75	7	5
Stony Plain. .	19	18	37	10	5
Strathcona.	49	26	75	12	6
Sturgeon....	20	18	38	6	6
Vermilion. . .	21	20	41	4	7
Vegreville.....	102	94	196	41	28
Victoria.....	32	39	71	7	10
Wetaskiwin. .	37	30	67	10	10
Calgary City....	375	300	675	113	112
Edmonton. . .	247	158	405	69	54
Lethbridge City.	118	81	199	32	32
Total	2,055	1,471	3,526	580	486

REGISTRATIONS RECEIVED FROM REGISTRARS THROUGHOUT THE RESPECTIVE
ELECTORAL DISTRICTS, 1910.

DEATHS BY ELECTORAL DISTRICTS	MONTHS												
	January	February	March	April	May	June	July	August	September	October	November	December	Total
Alexandra	6	7	3	5	2	5	..	5	7	1	1	5	47
Athabasca. . . .	2	..	1	6	5	2	1	2	3	2	3	..	27
Camrose.	1	3	11	7	2	3	10	12	4	4	1	4	62
Cardston.	2	2	6	7	2	..	2	3	1	4	1	3	33
Claresholm. . . .	5	6	9	..	1	4	6	7	8	4	4	6	60
Cochrane.	3	1	2	2	5	4	2	..	4	1	..	..	28
Didsbury.	6	3	4	14	5	6	6	12	12	10	7	5	90
Gleichen.	3	2	2	3	8	5	10	9	5	6	4	..	57
High River	2	2	6	4	10	3	2	5	2	4	4	..	47
Innisfail.	1	1	..	2	1	4	1	3	5	6	1	..	32
Lacombe.	4	1	3	5	6	2	3	4	2	..	5	..	38
Lac Ste. Anne. . .	3	..	2	2	2	4	1	7	9	7	7	7	51
Leduc.	6	2	3	3	2	3	1	6	6	4	3	1	40
Lethbridge. . . .	6	6	9	3	7	11	4	17	13	9	5	13	103
Macleod.	3	2	3	3	..	3	3	2	6	4	1	2	35
Medicine Hat. . .	15	13	16	22	23	19	29	27	13	11	17	16	221
Nanton.	4	5	4	1	5	2	3	11	3	5	3	2	48
Okotoks.	2	3	..	..	..	..	1	3	2	..	..	3	14
Olds.	2	4	5	3	4	8	1	6	9	2	5	..	49
Pakan.	8	10	11	5	17	10	14	17	18	13	8	8	139
Peace River. . . .	..	..	..	1	4	1	1	1	4	2	2	1	17
Pembina.	..	..	..	1	..	..	5	2	1	..	1	1	11
Pincher Creek. . .	4	2	1	5	3	3	3	13	7	2	3	5	51
Ponoka.	1	..	8	2	2	1	6	4	1	2	3	2	32
Red Deer.	6	4	6	3	6	6	6	7	9	8	8	6	75
Rocky Mount'n . .	14	5	7	5	5	12	15	14	6	11	6	37	137
Sedgewick.	4	2	4	4	5	7	4	9	5	1	5	4	54
St. Albert.	2	5	4	4	3	5	6	6	4	4	3	3	49
Stettler.	5	9	10	9	9	5	1	8	6	4	3	6	75
Stony Plain. . . .	2	2	2	5	3	2	4	6	4	1	4	2	37
Strathcona. . . .	6	7	6	9	4	1	10	13	5	7	3	4	75
Sturgeon.	3	2	1	3	4	3	2	8	3	2	3	4	38
Vermilion.	..	..	2	2	2	4	4	8	6	5	5	3	41
Vegreville.	13	9	18	11	17	16	16	31	17	15	18	15	196
Victoria.	12	5	7	6	2	7	3	10	4	4	4	7	71
Wetaskiwin. . . .	6	10	8	7	3	4	5	8	2	3	6	5	67
Calgary City. . . .	30	25	40	45	55	65	79	105	69	61	50	51	675
Edmonton.	22	24	27	26	31	32	50	44	39	38	38	34	405
Lethbridge City . .	14	23	11	15	17	10	19	26	17	19	13	15	199
Total.	228	207	262	259	286	282	339	481	341	286	258	297	3,526

VI.—PROVINCIAL SEED FAIR.

The Annual Provincial Seed Fair for the Province of Alberta was held in Edmonton on February 2nd, 3rd and 4th, 1910, under weather conditions which were ideal. A large crowd was in attendance and interest in the various competitions ran high. The fair was a decided success in every way and was pronounced by a number of those in attendance to have been the best ever in the country.

The competitors numbered twenty-eight more than in 1909, while the total entries in the various classes outnumbered those of last year by sixty-seven. Entries for the grain and weed judging competitions also showed up strong, topping last year's entries by eleven. It was gratifying to note that the entire province was well represented in the various classes, showing the wide-spread interest taken and the fine quality of seed throughout the whole country. The prizes, amounting to over \$1,600 were well distributed throughout the settled portions of the province. Those exhibits which remained after the fair were sold for what they would bring, and it was a gratifying and instructive fact to note that the price obtained was considerably in excess of that obtained last year. All first prize samples were retained by the Department.

The competition in most of the classes was very keen, there being in many cases only a quarter of a point between prize winners. Spring and fall wheats were judged by Professor S. A. Bedford, of Manitoba Agricultural College, and Mr. W. H. Fairfield, Superintendent of the Experimental Farm, Lethbridge. They had the pleasure of weighing the heaviest samples of wheat in their experience, winter wheat weighing sixty-eight lbs., and spring wheat weighing sixty-seven lbs., to the bushel. Professor Bedford was particularly interested in the spring wheat samples and said it was the first time in his experience that he had had the pleasure of handling and weighing a sample of spring wheat giving an authentic weight of sixty-seven lbs. to the bushel. The highest that he had previously handled was one at the Manitoba Provincial Seed Fair last year weighing sixty-six lbs. This apparently is the record weight for a measured bushel of wheat in the West and as Professor Bedford comes from another province famous for its high quality of spring wheat and jealous of its reputation, it is not to be supposed that he gave this sample any favour.

In the class for Red Fife spring wheat there was a magnificent showing of twenty-three entries. The first prize was won by an outstanding exhibit shown by Pawson Bros., of Coaldale, with W. J. Glass, of Macleod, a keen contestant for second place. In fact the judges found it somewhat difficult to make second and third choice as there were seven or eight most excellent samples, all good enough to win, from which choice had to be made.

In the class for any other variety of good milling spring wheat, Lewis Brew, of Lloydminster, was the fortunate winner of first place in a class of nineteen excellent entries.

In the fall or winter wheat classes prizes were offered for both soft and hard wheats. Owing to the superior qualities of Alberta Red Winter wheat for blending purposes by the Old Country miller, it is now commanding a premium over Kansas hard winter wheat which has hitherto held premier place. On account of this it is advisable for the Alberta farmer to grow the hard varieties for export and to leave the soft white varieties alone. The idea is that it is better for all the farmers in the province to unite and grow the same kind of wheat than each one to be everlastingly trying something new and thus have a mixed lot to offer for sale. This is further emphasized by the fact that the soft winter wheats of Alberta are only the equal of the winter wheats grown in Ontario. The effect of this educational policy was well demonstrated at the seed fair, where there were twenty-eight entries for Alberta Red, with excellent samples and keen competition, and only four indifferent entries for the soft white varieties. As can well be imagined with twenty-

eight entries in the Alberta Red class, there was a very strong competition for first place. "All the prizes winning exhibits weighed 67½ lbs. to the bushel with the exception of two exhibits, one of which weighed 67 lbs. and the other sample, which was finally awarded first place, tipping the scales at 68 lbs. to the bushel." The fortunate exhibitor of this sample, which was clearly an outstanding winner, was Alexander Woolley, of Medicine Hat. With only differences of a quarter of a point between various samples, the judges found it very difficult to pick out the winner. They were, however, located, first as above, second to A. R. Bennett of Magrath, third, J. B. Ririe, Magrath; fourth, Thos. Purdy, Macleod, and fifth, A. W. Price, Okotoks.

Although competition in the oat classes was hardly as keen as in the wheat, it was still close enough to give the judges considerable work in making awards. The judges in these classes were Mr. W. C. McKillican, B.S.A., Dominion Seed Branch, Calgary, and Mr. G. H. Hutton, B.S.A., Experimental Farm, Lacombe. Theirs was the pleasure of weighing out several samples of oats at 50 lbs. to the bushel, while numerous samples weighed over 46 lbs. This is the fourth Provincial Seed Fair, and at all previous fairs the first prize samples have invariably weighed 48 lbs. to the bushel. Alberta is justly proud of the high quality of her oats as well as of her "Alberta Red" winter wheat. The Dominion Government Inspector at Calgary stated before the Royal Grain Commission that 85 per cent. of the oats grown in Alberta and inspected by him would weigh 42 lbs. to the bushel. Entries in all classes were very large and the quality excellent throughout. The first prize exhibits in these classes were won by Ernest E. Swift at Meighen on the Grand Trunk Railway for Banner oats, Chas. H. Barrett of Lloydminster, on the Canadian Northern Railway, for milling oats, and James Black of Bowden on the Calgary & Edmonton line for short or feed oats.

Barley made an exceptionally fine showing both as to quality and quantity. Some of the two-rowed exhibits especially excited considerable comment on account of their exceedingly large, plump berries of beautiful colour. It was noticed that large amounts of seed were ordered from exhibitors on the strength of their showing in the exhibits. The first prize winners in the two classes were, John Robinson of Midnapore, on the southern branch of the Canadian Pacific Railway, and Alexander Woolley of Medicine Hat.

Alexander Woolley of Medicine Hat also took first prize in peas with a wonderful sample of large, white peas—Canadian Beauties—perfectly free from disease or insect injury of any kind. Mr. Woolley's address was taken by numerous intending buyers, with a view of making a start from his seed.

Flax, timothy, brome grass and rye grass seed were well represented in their classes, but little attention appears to be paid to alsike and red clovers. In their stead it is gratifying to note that alfalfa is being tried extensively; some good home grown seed being shown in this class.

THE CUP CLASSES.

Much to the gratification of those in charge, the entries in the cup classes were so large as to require a separate hall.

The Farm Crops trophy, valued at \$100.00, given for the best five bushels of spring wheat called out eighteen entries. There was not a single unworthy entry in the lot. The cup, after con-

siderable work, was finally awarded to W. J. Glass of Macleod, on a most excellent sample, but had Pawson Bros. of Coaldale made entry for this with similar wheat to that which they showed in the open classes. It is altogether likely that the cup would have gone to them. Along with the cup goes a cash prize of \$50.00. Second place went to A. J. W. Scott of Mannville, a cash prize of \$30.00, and a third prize of \$20.00 went to Lewis Brew of Lloydminster. This cup was won last year by John C. Buckley of Gleichen, who had an excellent entry at the fair this year, but not good enough to win in such strong competition.

The \$100.00 silver trophy offered by the Alberta Pacific Elevator Company of Calgary, for the best five bushels of Alberta Red wheat, brought out an entry of nine exhibits. Here A. R. Bennett of Magrath, who won this trophy last year was again successful in capturing it. If he is successful in winning it again next year it will be his own property for keeps, as all of the trophies offered at the fair must be won three times (not necessarily in succession) before they become finally the property of the winner. In any of these classes it was no disgrace to be defeated.

The Brackman-Ker Milling Company silver trophy valued at \$100.00, given for the best five bushels of milling oats, brought out twelve exhibits of high quality grain. First place was awarded to Chas. H. Barrett of Lloydminster. This cup was won last year by Wm. H. Poole of Curlew.

The Calgary Brewing & Malting Company offered a \$100.00 silver trophy for the best five bushels of six-rowed barley. This was captured last year by G. P. Liesemer, of Didsbury, who has again forwarded an excellent exhibit this year, but not good enough to win against the exceedingly fine sample sent in by S. C. Hagen of Winterburn.

The Canadian Pacific Railway Company also offered a trophy valued at \$125.00 and \$25.00 in cash prizes for the best two bushels of two-rowed barley, but before the awards were finally made in this class the samples had to stand a brewing test. Samples were therefore taken for testing purposes from four exhibits, the result being as follows: First, Wm. Marshall, of Namaka; second, Wm. Malins, of Alix; third, Alexander Woolley, of Medicine Hat; and fourth, Peter Jorgenson, of Olds; the cash prizes of \$15.00 and \$10.00 going to Wm. Marshall and Wm. Malins.

The Garton Pedigree Seed Company of Winnipeg offered a silver trophy valued at \$100.00 this year for the best five bushels of seed grain purchased from the company and grown during the last season. Although given late in the season a most splendid entry was made of high quality grain, first place being won by Mr. M. Smeltzer, of Strathcona.

The collection of cups offered at the seed fair made an excellent exhibit and attracted a great deal of attention in the front of the hall.

The competition in the special classes offered by the Canadian Seed Growers' Association did not bring out a very large entry. In the classes for sheaves there were some very fine entries, the first prize going to R. Page, of Langdon, for oats; Alberta Loughheed, of Bowden, for barley, and W. H. Pawson, for wheat in section 1 and oats in section 5.

Various meetings were held in connection with the fair which were generally crowded. The fair was fortunate in securing Professor F. B. Linfield, Director of Experimental Station at Bozeman,

Montana, to give several addresses on the important and interesting subject of dry farming. The various judges also gave interesting and instructive addresses relating not only to their work in judging, etc., but also some of the latest agricultural findings. The Honourable Duncan Marshall, Minister of Agriculture for Alberta, occupied the chair, opening the first meeting with a short address on the importance of clean seed in connection with keeping the country free of weeds.

PRIZE LIST.

Class	1st	2nd	3rd	4th	5th
1. Winter Wheat, Alberta Red.	\$20	\$15	\$12	\$8	\$5
2. Winter Wheat, any soft variety.	15	12	8	5	
3. Spring Wheat, Red Fife.	18	14	10	6	4
4. Spring Wheat, any other good milling variety . . .	18	14	10	6	4
5. Oats, Banner.	20	15	12	8	5
6. Oats, any other long or milling variety.	20	15	12	8	5
7. Oats, any short or feed variety.	18	14	10	6	4
8. Barley, six-rowed.	15	10	5		
9. Barley, two-rowed	15	10	5		
10. Peas.	12	8	5		
11. Flax Seed.	12	8	5		
12. Timothy Seed.	12	8	5		
13. Brome Grass Seed	12	8	5		
14. Rye Grass Seed.	12	8	5		
15. Red Clover Seed.	12	8	5		
16. Alsike Clover Seed.	12	8	5		
17. Alfalfa Seed.	12	8	5		
18. Judging Wheat	10	8	5	3	
19. Judging Oats.	10	8	5	3	
20. Identification of Weed Seeds	8	5	3		

Judging Competition.

18. Judging Wheat	10	8	5	3
19. Judging Oats.	10	8	5	3
20. Identification of Weed Seeds.	8	5	3	

The judging competitions will be held on Thursday, February 3rd, at 10 a.m., and be open to all farmers and farmers' sons in the province. The competitors will be expected to judge several varieties of wheat and oats and to identify several samples of weed seeds. In making the awards, 40 per cent. will be given for correct placing and 60 per cent. for written reasons.

Special Prizes.

Each of the trophies offered must be won three times before finally becoming the property of the exhibitor. Each winner's name will be engraved on the trophy won.

Class 21.—Best five bushels of spring wheat, silver trophy valued at \$100.00, donated by the publishers of Farm Crops Magazine, Winnipeg. In addition to the trophy the publishers offer a cash prize of \$50.00 to the winner, \$30.00 as a second, and \$20.00 as a third prize.

Class 22.—Best five bushels of Alberta Red wheat, silver trophy valued at \$100.00, donated by the Alberta Pacific Elevator Company of Calgary.

Class 23.—Best five bushels of milling oats, silver trophy valued at \$100.00, donated by the Calgary and Stratheona branch of the Brackman-Ker Milling Company.

Class 24.—Best five bushels of six-rowed barley, silver trophy valued at \$100.00, donated by the Calgary Brewing and Malting Company of Calgary.

Class 25.—Best two bushels of two-rowed barley, sterling silver trophy valued at \$125.00, donated by the Canadian Pacific Railway Company. In addition to the trophy the Company offers a cash prize of \$15.00 to the winner, and \$10 00

as a second prize. Chemical analyses and actual brewing tests will be considered in making the awards. The Company reserves the right to purchase winning exhibits at market prices.

Class 26.—Best five bushels of Garton's regenerated abundance oats, solid sterling silver trophy, valued at \$100.00, donated by The Garton Predigree Seed Co., of Winnipeg. The oats to be grown from seed obtained from this Company the spring preceding the Alberta Provincial Seed Fair, and the trophy to become the property of the person first winning it three times.

AWARDS.

Class 1. Number of Entries, 28.

1st.	Alexander Woolley.	Me licine Hat.
2nd.	A. R. Bennett	Magrath.
3rd.	J. B. Ririe	Magrath.
4th.	Thos. Parry	Macleod.
5th.	A. W. Price	Okotoks.

Class 2. Number of Entries, 4.

In this class no prizes were awarded, although the grain was a fine sample. The judges concluded, however, that the presence of certain impurities would hardly admit of prizes being awarded.

Class 3. Number of Entries, 23.

1st.	Pawson Brothers.	Coaldale.
2nd.	W. J. Glass.	Macleod.
3rd.	Alfred J. W. Scott.	Mannville.
4th.	W. G. Tom	Queenstown.
5th.	C. Best	Mannville.

Class 4. Number of Entries, 19.

1st.	Lewis Brew.	Lloydminster.
2nd.	E. C. Childe.	Lloydminster.
3rd.	John G. Brew.	Lloydminster.
4th.	Mrs. Philomene Bruchet.	Lethbridge.
5th.	Lewis Anderson.	Sedgewick.

Class 5. Number of Entries, 16.

1st.	Ernest E. Swift	Meighen.
2nd.	Robert McKay.	Blackfalds.
3rd.	Charles Forckel.	Okotoks.
4th.	Geo. R. Ball	Strathcona.
5th.	Jno. C. Buckley.	Gleichen.

Class 5. Number of Entries, 27.

1st.	Chas. H. Barrett.	Lloydminster.
2nd.	Ralph Weir	Ellerslie.
3rd.	R. L. Toepfer.	Alix.
4th.	A. W. Price	Okotoks.
5th.	A. Clark	Hortonburg.

Class 7. Number of Entries, 25.

1st.	Jas. Black	Bowden.
2nd.	R. Page	Langdon.
3rd.	Edward Walton.	Bowden.
4th.	Albert Lougheed.	Bowden.
5th.	Ernest A. Reed.	DeWinton.

Class 8. Number of Entries, 17.

1st.	John Robinson	Midnapore.
2nd.	A. P. Olsen.	Red Deer.
3rd.	R. G. Williams.	Lloydminster.

Class 9. Number of Entries, 12.

1st.	Alexander Woolley	Medicine Hat.
2nd.	Wm. Malins.	Alix.
3rd.	J. W. Ririe.	Magrath.

Class 10. Number of Entries, 2.

1st.	Alexander Woolley.	Medicine Hat.
2nd.	W. D. Trego.	Gleichen.

Class 11. Number of Entries, 8.

1st.	H. T. Harding.	Lougheed.
2nd.	John G. Brew.	Lloydminster.
3rd.	J. A. Commaert.	Strathmore.

Class 12. Number of Entries, 5.

1st.	Geo. Morton.	Innisfail.
2nd.	Geo. Wonacott.	Midnapore.
3rd.	Albert Lougheed.	Bowden.

Class 13. Number of Entries, 4.

1st.	Arthur Perry.	Cardston.
2nd.	J. H. Connell.	Gladys.
3rd.	John V. Thomson.	Gladys.

Class 14. Number of Entries, 2.

1st.	Arthur Perry.	Cardston.
2nd.	H. Ecklin.	Olds.

In classes 15 and 16, Red and Alsike Clover Seed, there were no exhibits, more attention being paid to alfalfa than clover in the province.

Class 17. Number of Entries, 2.

1st.	J. B. Ririe.	Magrath.
2nd.	Benjamin Matkin.	Magrath.

JUDGING COMPETITIONS.

Class 18. Number of Entries, 15.

1st.	A. Bruchet.	Lethbridge.
2nd.	Albert Lougheed.	Bowden.
3rd.	M. Smeltzer.	Strathcona.
4th.	J. Govenlock.	Lethbridge.

Class 19. Number of Entries, 16.

1st.	Albert Lougheed.	Bowden.
2nd.	M. Smeltzer.	Strathcona.
3rd.	J. Govenlock.	Strathcona.
4th.	A. Bruchet.	Lethbridge.

Class 20. Number of Entries, 6.

1st.	Albert Lougheed.	Bowden.
2nd.	Ernest Swift.	Meighen.
3rd.	A. Bruchet.	Lethbridge.

SPECIAL PRIZES.

Class 21. Number of Entries, 18.

1st.	W. J. Glass.	Macleod.
2nd.	Alfred J. W. Scott.	Mannville.
3rd.	Lewis Brew.	Lloydminster.

DEPARTMENT OF AGRICULTURE

Class 22. Number of Entries, 9.

1st. A. R. Bennett.....Magrath.

Class 23. Number of Entries, 12.

1st. Chas. H. Barrett.....Lloydminster.

Class 24. Number of Entries, 5.

1st. S. C. Haggen.....Winterburn.

Class 25. Number of Entries, 10.

1st. Wm. Marshall.....Namaka.
2nd. Wm. Malins.....Alix.

Class 26. Number of Entries, 5.

1st. M. Smeltzer.....Strathcona.

CANADIAN SEED GROWERS' ASSOCIATION SPECIALS.

Class 1, Section 5. Number of Entries, 2.

Best hand selected sheaf of oats, any white variety, showing full length of straw, consisting of 500 stalks, also additional sheaf of ten stalks showing roots.

1st. R. Page.....Langdon.
2nd. Albert Loughheed.....Bowden.

Class 1, Section 6. Number of Entries, 2.

Best hand selected sheaf of barley, any six-rowed variety, showing full length of straw, consisting of 500 stalks, also additional sheaf of ten stalks showing roots.

1st. Albert Loughheed.....Bowden.
2nd. E. Carswell.....Penhold.

Class 2, Section 1. Number of Entries, 2.

Spring Wheat, Red Fife (open to members of at least two years' standing), same as Class 1, but not including roots. In addition to the sheaf, half a bushel to a bushel and a half of seed to be shown according to the section.

1st. W. H. Pawson, Jr.....Coaldale.
2nd. P. Hecko.....Clover Bar.

Class 2, Section 5. Number of Entries, 1.

Oats, any white variety (open to members of at least two years' standing), same as Class 1, but not including roots. In addition to the sheaf, half a bushel to a bushel and a half of seed to be shown according to the section.

1st. W. H. Pawson, Jr.....Coaldale.

VII.—MISCELLANEOUS.

Under this heading is grouped comments on a number of subjects of more or less importance but under the separate heads there is not at present sufficient information at hand to warrant more than brief mention.

IRRIGATION.

Owing to the dry season, the benefits of irrigation were easily demonstrated. Unfortunately, however, the previous season having had sufficient rainfall for the successful growth of crops there were not as many acres under irrigation as there should have been. With

the completion of the various ditches in the province and the lessons that have been learned from this season, it is evident that in the future irrigation will play a much more important role in the agriculture of the province than it has ever done in the past. Whatever water was used, excellent returns were obtained.

The Department was represented at the annual meeting of the Western Canada Irrigation Association which held its annual meeting at Kamloops, British Columbia, by the Honourable the Minister of Agriculture and the Deputy Minister. The convention was a successful one, quite a large representation being present from Alberta. The next convention will be held in the City of Calgary.

DRY FARMING.

Owing to the dry season, those farmers who had been following the principles of dry farming more or less successfully, were rewarded for their faith in this system of cultivation. When the rainfall in any year is amply sufficient for the growth of crops, it apparently makes little difference whether the farmer is conducting his methods of work along correct lines or not. This is owing to the abundant fertility of the soil. When, however, untoward conditions occur, such as were present this year, it is easy to distinguish between the farmer who is following the correct lines of cultural methods and the one who is not. All over the country striking examples of this were in evidence. On one side of the road or of the fence would be seen an excellent crop, on the other side a failure. The difference lay in the intelligence with which the cultivation of the land had been done. While financially disastrous to some farmers, the drought of the present year will in the end be a blessing in disguise to thousands of farmers, as it has forced home on them the necessity for following correct methods of work in handling their soil so as to preserve the rainfall when it comes. It is therefore naturally expected that in future the principles underlying what is properly called dry farming will be more closely followed than ever they have been in the past.

The holding of the fifth Dry Farming Congress at Spokane, Washington, presented an excellent opportunity for the farmers of Alberta to attend this interesting meeting and gather information as to the best methods of soil cultivation from experts from all parts of the world. Headed by the Honourable the Minister of Agriculture, the province was represented by some ninety-three delegates. With the single exception of the State of Montana, Alberta had the honour of having the largest delegation present of any state or province on the North American continent.

In addition to the number of delegates present advantage was taken of the exposition of dry farming products in connection with the congress to make an exhibit of the products of Alberta. The province as a whole, entered an exhibit in competition for a grand challenge silver cup offered as a trophy for the best display made by any state or province. This cup was donated by the Governor of the State of Washington, and Alberta has the honour of having won it. This is no small honour when it is known that the province was in competition with a large number of the influential states in the union to the south of us.

Besides winning this grand challenge cup, the boards of trade at Cardston, Lethbridge and Macleod made excellent exhibits and captured numerous prizes.

Individual prizes were won as follows:

- Winter Wheat—1st, H. Bates, Macleod; 2nd, W. Damon, Macleod; 3rd, W. J. Glass, Macleod.
- Spring Wheat—1st, C. Clark, Macleod; 2nd, C. H. Primrose, Macleod; 3rd, Nick Tattinger, Claresholm.
- Oats—1st, W. J. Glass, Macleod; 2nd, P. A. Switzer, Lacombe.
- Barley—1st, W. J. Glass, Macleod; 2nd, H. McIntosh, Macleod.
- Sheaf of Spring Wheat—1st, E. A. Wintermute, Macleod; 2nd, A. Perry, Cardston.
- Oats in sheaf—A. Perry, Cardston; 2nd, R. R. Coffey, Macleod.
- Potatoes—2nd, Maunsell Brothers, Macleod; 3rd, A. Perry, Cardston.
- Sheaf of Timothy—A. Perry, Cardston.
- Sheaf of Native Grass—A. Perry, Cardston.
- Sheaf of Brome Grass—A. Perry, Cardston.
- Display of Grass—A. Perry, Cardston.
- Best display of Sand Forage crop—1st, Cardston Board of Trade; 2nd, A. Perry, Cardston.
- Best individual exhibit of grain from summer fallow land—A. Perry, Cardston.
- Best individual exhibit of agricultural products by a commercial body—2nd, Cardston Board of Trade.
- Best display of Threshed Grain—1st, Macleod Board of Trade.
- Best display of Wheat—2nd, Macleod Board of Trade.
- Best County Display—2nd, Macleod.

It will be noticed from the above that the province was successful in capturing practically all the important grain prizes. If the provincial exhibit had had a larger supply of exhibits forward, entries could have been made in cabbage, cauliflower, turnips, celery, tomatoes, pumpkins, Windsor beans and several other kinds of vegetables that would have won first place. In this connection, attention might be called to the fact that Mr. George Lane of High River showed his high class Percherons at the State fair which was held at the same time and place. He showed eleven animals, making seven entries in thirteen different classes, and winning thirteen firsts, two seconds, and the grand challenge cup for the best exhibit of heavy horses. It will be seen that at this exposition, Alberta was distinctly in the lime-light.

CHANGES IN THE STAFF.

During the year there have been a number of changes in the staff of the Department and a number of additions. The largest change was the creation of a new branch, known as the Bureau of Publicity. This branch is in charge of Mr. C. S. Hotchkiss, as Chief Publicity Commissioner. Under him are officers at Toronto, Montreal, Detroit and Winnipeg.

A successor to the late T. B. R. Henderson, as Chief Inspector of Weeds, was found in Mr. C. E. Lewis, of Essex County, Ontario.

In conclusion I wish to state that the thanks of the Department are due to the press of the province for their readiness to publish any information furnished by the Department, for their willingness to assist, wherever it lay in their power, the work of the Department had in hand. Indeed it is a great pleasure to state that in whatever direction looked for assistance in any project which it had under way, it always has been accorded hearty support and good wishes.

I have the honour to be, Sir,

Your obedient servant,

GEO. HARCOURT,
Deputy Minister of Agriculture.



TESTING CREAM AT SCHOOL OF INSTRUCTION FOR BUTTER MAKERS.

2.—REPORT OF THE DAIRY COMMISSIONER.

SIR,—I have the honour to submit herewith the report of the Dairy Commissioner's Branch for the year ending December 31, 1910.

For convenience of reference the report is divided into the following sections, viz.:

- I.—General.
- II.—Individually operated Creameries in Alberta 1910.
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I.—GENERAL.

The butter and cheese production of the province for the year 1910 was slightly smaller in volume than that for the preceding twelve months. This is due chiefly to the short and dry pastures during the spring and early part of the summer when the rainfall was comparatively light. So long as the dairyman depends almost entirely on the native grass pastures to furnish the summer feed for his milch cows we must expect to see more or less fluctuation in the dairy production from time to time. Reference was made to this point in my former report and it is hoped that more attention will be given to the growing of green crops to supplement the pastures for dairy stock. With the prices that can be realized in the west for dairy products of choice quality, the growing and feeding of succulent crops would certainly prove profitable to the dairyman. It would increase the daily milk yield of the cows and lengthen their milking period as well.

The large influx of people into the province and the almost phenomenal growth of the larger centres of population has resulted in a corresponding increase in the demand for dairy products in our home markets. It is worthy of note here that the dairymen in the districts surrounding Edmonton and Calgary have been utterly unable to supply the demand for fresh milk and cream desired for consumption in these cities, and dealers have found it necessary to go far afield, even up to a hundred miles or more to secure and ship in by rail sufficient milk and cream to supply their trade. This shows that we have here magnificent opportunities for dairymen who will take up the work in a rational and businesslike manner. There has been a good local demand with good prices for butter made in home dairies.

The reported cheese output of the eleven cheese factories operated during the season of 1910 was 110 tons and valued at \$27,500 as against 112 tons valued at \$28,000 for the season of 1909.

The butter production of the 60 creameries was 2,315,000 pounds for the year and its estimated selling value \$575,000, as against 2,550,000 pounds for 1909 valued at \$600,000. It will thus be seen that the cheese production of the cheese factories and the butter output of the creameries has this year been slightly smaller than that of last. The reason may be found, as already stated, partly in the short pastures and partly in the larger local markets for milk, cream and home made butter.

In discussing the condition of dairying generally, there are one or two points that may be noted in passing as having historical interest.

During the season of 1910 a number of co-operative creameries adopted, in co-operation with the department, a system of cream and butter grading and quality basis payment for butter and cream, whereby the creamery, and the patron, who furnished first grade butter or cream, received a premium or extra price for quality. The Calgary Central Creamery, owned by Mr. P. Pallesen, also adopted that system. Particulars are given at some length under another section of this report.

The passing of Part II of The Dairymen's Act at the 1910 Session of the Legislature also calls for special mention here. The Act in its present form provides for the organization, registration and management of butter and cheese manufacturing associations, for the sanitary inspection of creameries, cheese factories and farm dairies and for the appointment of dairy inspectors. It provides standards for the sampling and testing of milk and cream, for the records to be kept and statements to be rendered to patrons in connection therewith by cheese factories and creameries. The Dairymen's Act stands for the square deal in our dairy industry. The proper observance of its provisions will ensure fair treatment of the patrons, fair competition among the factories and a finer and, therefore, more valuable product to be placed upon the market. All this will help to inspire and build up confidence and satisfaction in every department of the industry from the patron who is the original producer, to the consumer who pays the bills.

II.—INDIVIDUALLY OPERATED CREAMERIES IN ALBERTA, 1910.

In the following list of individually operated creameries we give the name and address of the proprietors as last registered on our files.

NAME OF CREAMERY	PROPRIETOR	P.O. ADDRESS
1. Initial Creamery.....	O. O. Taylor.....	Harmattan.
2. Neapolis Creamery.....	H. L. Reimer.....	Neapolis.
3. White Swan Creamery.....	Robert McCue.....	Bowden.
4. Wild Rose Creamery.....	A. Barrett.....	Ponoka.
5. Golden Rod Creamery.....	T. A. Brereton.....	Clive.
6. Three Hills Creamery.....	A. W. Pratt.....	Three Hills.
7. Bentley Creamery.....	J. F. Millar.....	Bentley.
8. Golden Rose Creamery.....	The J. Harris Co., Ltd.....	Camrose.
9. Lakeside Creamery.....	The Leduc Produce Co.....	Leduc.
10. Mayton Creamery.....	W. L. Fischer.....	Mayton.
11. Knee Hill Creamery.....	Baron & Nelson.....	Sunny Slope.
12. Carbon Creamery.....	Blois & Davies.....	Carbon.
13. Parisian Creamery.....	Trochu Creamery Co.....	Trochu.

NAME OF CREAMERY	PROPRIETOR	P.O. ADDRESS
14. Trimble Creamery.....	Trimble & Edwards.....	Pine Lake.
15. Trimble Creamery.....	H. W. Trimble.....	Red Deer.
16. Clover Hill Creamery.....	F. N. Ballard.....	Didsbury.
17. Lewisville Creamery.....	J. G. and M. Gibbon.....	Lewisville.
18. Pincher Creek Creamery.....	McKerricker Bros.....	Pincher Creek.
19. Red Lodge Creamery.....	Colin Thomson.....	Red Lodge.
20. Edmonton City Dairy.....	Edmonton City Dairy, Ltd.....	Edmonton.
21. Lilly Bank Creamery.....	Cunningham & Grove.....	Vegreville.
22. Sedgewick Creamery.....	Ira Joy.....	Sedgewick.
23. Blue Bell Creamery.....	W. A. Brodie.....	Mannville.
24. Lacombe Creamery.....	Anderson & Robinson.....	Lacombe.
25. Riviere Qui Barre Creamery.....	Joseph Poirier.....	Riviere Qui Barre.
26. Golden Meadow Creamery.....	The J. Harris Co.....	Camrose.
27. Wittenberg Creamery.....	J. F. Millar.....	Bentley.
28. Quarrel Creamery.....	John A. Brown.....	Quarrel.
29. Twin Spruce Creamery.....	H. H. Reimer.....	Elkton.
30. Black Diamond Creamery.....	Eric W. Buckler.....	Black Diamond.
31. Ghost Pine Creek Creamery.....	George E. Fortune.....	Ghost Pine Creek.
32. Calgary Central Creamery.....	P. Pallesen.....	Calgary.
33. Wetaskiwin Creamery.....	Wetaskiwin Produce Co.....	Wetaskiwin.
34. C.P.R. Demonstration Farm.....	C.P.R. Co.....	Strathmore.
35. Morinville Creamery.....	Noe Beaupre.....	Morinville.
36. The Carlyle Dairy Co.....	Carlyle Bros.....	Calgary.
37. Alberta Central Creamery.....	W. Podmore.....	Edmonton.
38. Ferintosh Creamery.....	Hanson & Johnstone.....	Ferintosh.
39. Beiseker Creamery.....	Wm. H. Davies.....	Didsbury.
40. Bawlf Creamery.....	J. E. Hanson.....	Bawlf.
41. Evarts Creamery.....	T. B. Millar.....	Sylvan Lake.
42. O.K. Creamery.....	O.K. Creamery Co.....	Morningside.
43. Beaver Lake Creamery.....	Beaver Lake Farmers' Creamery Association.....	Ryley.
44. Duvernay Creamery Ass'n.....	F. N. Therrien, Secretary.....	Duvernay
45. Olds Creamery Association.....	W. Hamilton, Secretary.....	Olds.
46. Blackfalds Butter and Cheese Mfg. Ass'n.....	G. L. Gregson, Secretary.....	Blackfalds.
47. Earlville Butter and Cheese Mfg. Association.....	W. W. Batson, Secretary.....	Earlville.

III.—CHEESE FACTORIES IN ALBERTA, OPERATED IN 1910.

Following is information concerning the location and ownership of cheese factories.

FACTORY	PROPRIETOR	P.O. ADDRESS
1. Burnt Lake.....	T. B. Millar.....	Sylvan Lake.
2. Eckville.....		
3. Pitcox.....		
4. Kunsamo.....		
5. Cremona.....	Western Dairy & Produce Co.	Calgary.
6. Red Deer.....	H. W. Trimble.....	Red Deer.
7. White Swan.....	Robert McCue.....	Bowden.
8. Erskine.....	Erskine Butter & Cheese Co.....	Erskine.
9. Bottrel.....	J. F. Boucher.....	Bottrel.
10. Sturgeon River.....	Napoleon Auclair.....	Lamoureux.
11. Copland.....	F. M. Copland.....	Innisfail.

IV.—CREAMERIES OPERATED UNDER GOVERNMENT DIRECTION.

Thirteen co-operative creameries were operated under the direction of the department during the season of 1910 on behalf of, or by, the farmers' associations who own them. Last year's report will show that twenty-one creameries were operated by the government during the season of 1909. The falling off in the number is

accounted for by the fact that the associations of Earlville, Blackfalds, Evarts and Olds took over and conducted the business themselves in conformity with the original provision of the plan under which the government undertook the management and operation of creameries, and in the case of the creameries at Stettler, Bonnie Glen, Vermilion and Lamerton, a combination of local conditions made it appear inadvisable to re-open them last spring because there was not a sufficient cream supply in sight to make their operation profitable.

Table I presents a record of the patronage, the cream supply, the butter output and its average selling price and gross value at the several creameries working under provincial government management since May 1st, 1906. Particulars of the business of the creameries which commenced operation prior to that date will be found in the annual report of the department for 1908.

TABLE I.—SUMMARY OF BUSINESS DONE AT GOVERNMENT CREAMERIES, IN ALBERTA, 1906 TO 1910, INCLUSIVE.

NAME OF STATION	Season	No. of Patrons	Inches of Cream Supplied	Lbs. of Cream Supplied	Lbs. of Butter manufactured	Average price realized at Creamery per lb.	Manufacturing Charge per lb.	Number of days in operation	Gross value of product
Calgary.....	1906	54	24,708.8	.....	27,169	21.647	Cents 4	148	\$5,881.38
	1907	14	.....	16,136	5,028	23.715	4	90	1,192.42
Innisfail.....	1906	233	144,736.8	.....	186,486	21.589	4	187	40,261.03
	1906-7	173	31,333.9	.....	35,380	27.848	4	174	9,852.65
	1907	179	17,953.2	305,116.2	119,834	23.468	3.989	189	28,123.01
	1907-8	97	.....	78,626	22,191	30.322	4	181	6,728.81
	1908	157	.....	350,405	115,056	25.674	3.253	168	29,539.38
	1908-9	164	.....	155,640	48,517	25.947	4	196	12,589.17
	1909	218	.....	467,629	155,776	24.051	3.3562	168	37,465.71
	1909-10	155	.....	110,389	34,108	28.246	4	194	9,634.44
	1910	...	.....	.....	88,284	25.92	2.01	167	22,882.46
	1906	161	83,088.0	.....	100,036	21.315	4	187	21,323.57
Red Deer	1906-7	83	17,154.9	.....	20,358	27.882	4	124	5,676.23
	1907	83	12,670.0	110,427.7	53,224	23.481	4	189	12,497.95
	1907-8	69	.....	51,866.5	14,931	30.123	4	181	4,497.72
	1908	125	.....	277,874	87,585	25.539	3.394	168	22,368.06
	1908-9	142	.....	145,231	42,620	25.813	4	196	11,001.57
	1909	148	.....	316,523.5	97,591	23.9892	3.9866	168	23,411.43
	1909-10	102	.....	84,428	25,495	28.268	4	194	7,207.14
	1910	...	.....	.....	75,546	26.01	1.97	167	18,872.76
	1906	161	83,088.0	.....	100,036	21.315	4	187	21,323.57
	1906-7	83	17,154.9	.....	20,358	27.882	4	124	5,676.23

TABLE I.—SUMMARY OF BUSINESS DONE AT GOVERNMENT CREAMERIES, IN ALBERTA, 1906 TO 1910, INCLUSIVE.—Continued.

NAME OF STATION	Season	No. of Patrons	Inches of Cream Supplied	Lbs. of Cream Supplied	Lbs. of Butter manufactured	Average price realized at Creamery per lb.	Manufacturing Charge per lb.	Number of days in operation	Gross value of product
Wetaskiwin.....	1906	100	56,579.7	.....	72,021	Cents 21.073	4	195	15,176.95
	1907	38	1,318.3	47,116	17,194	22.598	4	189	3,885.64
	1908	32	.....	64,911	20,124	24.988	4	146	5,028.61
	1909	37	.....	59,474	17,136	23.763	4	168	4,071.33
	1910	...	.....	.....	28,149	25.82	2.58	167	7,268.65
Markerville.... (Tindastoll)	1906	106	68,523.5	.....	89,471	21.326	4	187	19,080.85
	1906-7	86	17,477.8	.....	20,436	27.882	4	174	5,654.14
	1907	106	17,404.6	168,501.3	82,322	23.227	3.728	189	19,121.02
	1907-8	75	.....	49,244	14,907	30.057	4	181	4,480.71
	1908	101	.....	251,740.4	90,951	25.478	3.377	168	23,172.60
	1908-9	102	.....	101,300	32,467	25.626	4	196	8,320.03
	1909	120	.....	277,531.5	99,110	23.9617	3.9522	168	23,748.47
	1909-10	101	.....	80,400	24,529	28.06	4	194	6,882.80
	1910	...	.....	.....	78,018	26.04	2.39	167	20,317.01
	1906	117	80,128.1	.....	105,129	21.376	4	187	22,472.11
Olds.....	1906-7	63	14,150.3	.....	16,262	27.667	4	174	4,531.88
	1907	114	9,334.3	186,071	71,678	23.279	3.77	189	16,686.13
	1907-8	48	.....	35,685	9,621	30.118	4	181	2,897.69
	1908	79	.....	190,450	63,656	25.518	3.763	168	16,243.94
	1908-9	174	.....	39,588	12,100	25.774	4	145	3,118.72
	1909	102	.....	213,920	69,504	24.0704	4	168	16,729.90
	1909-10	45	.....	19,264	5,682	28.058	4	194	1,594.31

Blackfalds.....	1906-7	153	67,987.2	...	90,285	21.12	4	187	19,068.65
	1906-7	53	9,739.8	...	11,300	27.602	4	174	3,119.06
	1907	83	5,331.4	108,299.05	40,345	23.19	4	189	9,356.22
	1907-8	30	.....	22,657.4	6,836	30.021	4	181	2,052.25
	1908	79	.....	137,185.7	45,728	25.493	4	168	11,657.49
	1908-9	64	.....	44,669.9	13,005	25.889	4	196	3,366.99
	1909	44	.....	102,707.2	32,797	23.8399	4	168	7,818.79
	1909-10	...	.....	26,114.3	6,242	27.766	1.961	194	1,895.79
Lacombe.....	1906	108	48,569.1	...	63,729	20.964	4	187	13,352.51
	1907	19	1,198.5	26,298.55	12,465	22.705	4	134	2,830.28
	1908	15	.....	13,586	4,970	23.97	4	62	1,191.32
Beaver Hills.....	1906	21	4,731.1	.....	6,482	20.208	4	67	1,309.90
Clover Bar.....	1906	47	12,665.8	.....	14,090	20.788	4	132	2,929.18
Earlville.....	1906	141	71,876.0	.....	90,768	21.219	4	216	19,260.13
	1907	65	5,974.9	81,836.5	34,429	22.949	3.988	181	7,901.31
	1908	69	.....	125,690.3	38,714	25.492	3.988	188	9,869.09
	1908-9	74	.....	18,189.6	5,392	24.746	4	47	1,334.33
	1909	86	.....	132,393	40,916	23.7991	4	168	9,737.65
	1909-10	38	.....	4,936.25	1,528	27.905	4	39	426.40
	1910	27	.....	4,813	1,375	28.32	4	27	389.45
Evarts.....	1906	79	35,210.8	.....	37,292	21.126	4	188	7,878.48
	1907	59	4,423.1	60,683.1	23,390	22.819	4	186	5,337.51
	1907-8	19	.....	13,617	3,593	29.974	4	181	1,076.96
	1908	49	.....	84,467.2	26,012	25.418	4	168	6,611.80
	1908-9	32	.....	27,308.3	7,616	25.567	4	196	1,947.19
	1909	44	.....	65,201.3	20,073	23.8879	4	168	4,794.79

TABLE I.—SUMMARY OF BUSINESS DONE AT GOVERNMENT CREAMERIES, IN ALBERTA, 1906 TO 1910, INCLUSIVE.—Continued.

NAME OF STATION	Season	No. of Patrons	Inches of Cream Supplied	Lbs. of Cream Supplied	Lbs. of Butter manufactured	Average price realized at Creamery per lb.	Manufacturing Charge per lb.	Number of days in operation	Gross value of product
Ferry Bank	1906	92	43,255.0	..	54,999	21.081	Cents 4	173	11,594.57
	1906-7	60	6,227.2	..	7,190	27.630	4	109	1,986.61
	1907	89	16,979.7	96,371	53,430	23.17	3.809	188	12,380.11
	1907-8	31	..	5,568	1,666	30.0	4	26	499.44
	1908	89	..	130,776.5	44,554	25.435	4	168	11,332.34
	1908-9	55	..	14,411.5	4,622	25.867	4	68	1,195.61
	1909	70	..	78,133	27,562	23.7724	4	168	6,552.17
Martins...	1910	..	..	..	26,574	25.76	3½	167	6,845.36
	1906	82	..	95,959	31,151	..	5	153	6,017.75
	1907	23	..	11,494	3,966	21.52	4	92	853.49
Pine Creek... (Lakeview)	1906	58	20,650.3	..	24,274	21.798	4	117	5,291.47
	1907	60	7,487.2	80,158.9	31,400	23.3404	4	195	7,329.05
	1907-8	18	..	1,270	317	30.22	4	13	95.80
	1908	62	..	92,454.1	26,938	25.611	4	158	6,899.17
	1909	92	..	160,961	47,182	24.0746	4	181	11,358.88
	1909-10	64	..	32,566	8,266	28.219	4	194	2,332.59
	1910	..	..	..	31,542	25.1	2.55	167	7,918.67
Rosenroll	1906	63	15,752.4	..	20,506	21.184	4	126	4,344.01
	1906-7	8	759.3	..	848	27.421	4	56	232.53
	1907	40	1,014.8	34,022.4	11,722	22.41	4	134	2,626.92
	1908	47	..	88,316	26,564	25.319	4	168	6,725.79
	1908-9	34	..	8,165.5	2,502	24.826	4	54	622.41
	1909	56	..	72,038	21,155	23.6447	4	168	5,002.04
	1910	15	..	20,633	5,405	25.81	4	115	1,395.03

Stettler.....	1906	76	23,726.1	...	29,439	21,088	4	146	6,208.11
	1907	57	1,402.7	67,879.9	23,605	22.71	4	172	5,360.69
	1908	44	...	49,694.9	17,113	25.192	4	153	4,311.04
	1909	42	...	25,244.1	8,729	23.6603	4	111	2,065.31
Stony Plain.....	1906	64	6,122.8	.....	7,029	21.46	4	64	1,508.46
	1907	35	2,201.7	.....	2,756	22.053	4	48	607.79
Content....	1907	60	2,598.1	71,423.3	26,725	22.942	4	174	6,131.29
	1908	81	.....	128,697	42,196	25.384	3,581	188	10,711.03
	1908-9	86	.....	49,870	13,884	25.7	4	196	3,568.42
	1909	79	.....	90,583	29,189	23.7925	4	168	6,944.80
	1909-10	26	.....	5,771	1,710	27.852	4	40	476.27
	1910	49	.....	43,684	13,947	24.33	4	124	3,394.39
Crossfield.....	1907	24	.....	15,804.5	4,292	22.1645	4	69	951.30
Rimbey.....	1907	39	.....	17,998	5,938	22.8583	4	61	1,361.08
	1908	51	.....	61,893	20,148	25.327	4	160	5,103.02
	1908-9	18	.....	2,616	864	27.370	4	20	236.47
	1909	46	.....	54,483	18,304	23.88	4	168	4,371.01
	1909-10	19	.....	2,143	379	28.076	4	13	162.56
	1910	...	.....	.....	16,279	25.87	3½	162	4,211.30
Lamerton.....	1907	60	.....	72,304.85	21,912	22.6593	4	152	4,966.26
	1908	49	.....	52,355.9	19,303	25.321	4	152	4,877.69
	1909	49	.....	55,113.4	21,022	23.5951	4	168	4,960.17
Spring Lake.....	1907	24	.....	23,045	7,528	23.797	4	94	1,791.51
	1908	52	.....	95,797.5	32,480	25.177	3,792	188	8,177.61
	1908-9	39	.....	29,671	9,610	24.935	4	196	2,366.26
	1909	69	.....	108,675	37,310	23.7424	4	168	8,858.30
	1909-10	39	.....	18,463	6,030	27.911	4	194	1,683.04
	1910	31	.....	66,254	23,131	26.38	4	167	6,102.12
Vegreville.....	1908	29	.....	18,098	5,085	23.967	4	45	1,218.75

TABLE I.—SUMMARY OF BUSINESS DONE AT GOVERNMENT CREAMERIES, IN ALBERTA, 1906 TO 1910, INCLUSIVE.—Continued.

NAME OF STATION	Season	No. of Patrons	Inches of Cream Supplied	Lbs. of Cream Supplied	Lbs. of Butter manufactured	Average price realized at Creamery per lb.	Manufacturing Charge per lb.	Number of days in operation	Gross value of product
Bonnie Glen.	1908	27		20,016	5,949	25.02	4	111	1,488.46
	1909	23		8,530	2,409	23.1225	4	33	559.43
Vermilion	1908	77		67,876.3	20,200	25.213	4	105	5,093.02
	1908-9	39		7,038	1,645	27.625	4	34	454.43
	1909	29		17,328.5	4,599	23.1433	4	90	1,064.36
Conjuring Creek.	1908	56		75,189.4	22,915	25.228	4	160	5,781.03
	1908-9	47		10,297.5	2,696	23.544	4	48	634.76
	1909	76		85,581.9	27,220	23.7712	4	168	6,470.52
	1909-10	21		3,263.7	978	28.019	4	40	274.00
	1910	...		.....	17,526	26.02	3½	167	4,561.66
Viking.	1909	62		47,687	17,498	24.4818	4	84	4,283.82
	1910	..		.....	35,203	26.25	3½	171	9,243.68
Daysland.	1909	62		64,614.5	23,384	23.8406	4	132	5,574.89
	1909-10	29		6,346.8	2,177	27.7	4	67	603.08
	1910	55		73,298	27,330	26.2	4	167	7,162.20

Table II gives a summary of the foregoing by summer and winter seasons, respectively. It will be noted in the sixth column that in recent years there has been a marked upward movement in the selling prices of the butter.

TABLE II.—TOTALS OF THE FOREGOING SEASONS.

SEASON	No. of Patrons	Inches of Cream Supplied	Lbs. of Cream Supplied	Lbs. of Butter manufactured	Average price realized at Creamery per lb.	Gross Value of Product
1906	1,755	808,311.5	95,959	1,050,356	cents 21.227	\$222,959.11
1906-7	526	96,843.2	.....	111,774	27.784	31,053.10
1907	1,268	107,292.5	1,600,986.71	653,208	23.161	151,291.78
1907-8	387	.....	258,533.9	74,062	30.149	22,329.38
1908	1,370	.....	2,377,474.2	776,241	25.432	197,411.24
1908-9	970	.....	653,996.8	197,545	25.708	50,786.43
1909	1,554	.....	2,504,361.6	818,462	23.9282	195,843.77
1909-10	640	.....	.....	117,324	28.1415	33,172.40
1910	.....	.....	.....	465,309	25.9106	120,564.74
		1,012,447.2	7,491,312.21	4,264,281		\$1,025,411.95

Table III deals with the summer season's business only. The periods referred to in the three columns to the right were made up as follows:—First, from the beginning of the summer season to May 28th; second, from May 28th to August 20th; third, from August 20th to October 15th, which ended the summer season's business.

The average prices shown in the fifth column are based on the proportional butter output of each creamery during the several periods and upon the payment during the second and third periods of a premium of two cents per pound of butter grading "first." Particulars as to grading will be found elsewhere in this report.

As in former years the butter output of the government operated creameries was marketed and consumed in British Columbia and in the Yukon Territory.

TABLE III.—SUMMARY OF THE BUSINESS DONE FOR THE SUMMER SEASON 1910, AT THE PROVINCIAL GOVERNMENT CREAMERIES IN ALBERTA.

CREAMERY AT	No. of Patrons	Butter Manufactured lbs.	Value at Creamery	Average price at Creamery for season	Average prices by pounds		
					First Period	Second Period	Third Period
Innisfail.....	*	88,284	\$22,882.46	c. 25.92	c. 28.24	c. 25.09	lc. 27.20
Markerville.....	*	78,018	20,317.01	26.04	28.24	25.22	27.36
Red Deer.....	*	72,546	18,872.76	26.01	28.24	25.12	27.39
Content.....	49	13,947	3,394.39	24.33	28.33	24.02	.....
Earlville.....	27	1,375	389.45	28.32	28.32	.....	.....
Ferry Bank.....	*	26,574	6,845.36	25.76	28.24	25.04	26.86
Wetaskiwin.....	*	28,149	7,268.65	25.82	28.24	25.10	27.08
Rosenroll.....	15	5,405	1,395.03	25.81	28.24	25.63	.....
Viking.....	*	35,203	9,243.68	26.25	28.24	25.34	27.49
Daysland.....	55	27,330	7,162.20	26.20	28.24	25.68	27.20
Lakeview.....	*	31,542	7,918.67	25.10	28.24	24.08	26.01
Coniuring Creek.....	*	17,526	4,561.66	26.02	28.24	25.21	27.52
Rimbey.....	*	16,279	4,211.30	25.87	28.25	25.06	27.56
Spring Lake.....	31	23,131	6,102.12	26.38	28.25	25.49	27.63
Totals and averages...	..	465,309	\$120,564.74	25.91	28.24	25.08	27.22

*The "No. of Patrons" is not given for the reason that the patrons' accounts were kept at the creamery indicated.

V.—CONVENTION OF CREAMERY ASSOCIATION DELEGATES.

The following letter calling the annual convention of creamery delegates was addressed to the secretaries of the associations whose creameries had been operated by the provincial government during the previous year, outlining the subjects which were to be presented and discussed.

PROVINCE OF ALBERTA.

DEPARTMENT OF AGRICULTURE.

OFFICE OF THE DAIRY COMMISSIONER.

Calgary, December 8, 1909.

I am directed by the Honourable the Minister of Agriculture to advise you that the annual convention of creamery delegates will be held at Red Deer and the opening session called for 2 p.m. Wednesday, January 5th, 1910. Kindly see that delegates to the Convention be appointed by your Board and their names communicated to this office as soon as practicable. I would suggest that the President and Secretary of each Association be appointed delegates. By virtue of their office they have an intimate knowledge of the local work of the Associations and are, therefore, better able to discuss matters in general than any one who has not been occupying a leading position upon the Board.

The convention is called at an earlier date than in former years so as to enable the delegates to report to their respective associations at their forthcoming annual general meetings in January and later. Any necessary by-laws or rules may then be promptly enacted to cover the proposed change in the local management and financing of the business of the creameries.

The following are among the matters which will be submitted to the delegates for discussion, viz.:

1. The business of the Government Creameries for the past year, and a general review of market conditions.

2. The adoption of a system of grading both the butter and cream at the creameries as a basis for quality payment. Apart from systematic grading of the butter made in the Government Creameries considerable preliminary work has been done during the past summer along the line of grading the cream received from individual patrons. The results of this work will be summarized and submitted at the convention.

3. The proposed change in the local management of the Government creameries. This matter was discussed by the Deputy Minister at the Red Deer Convention in April last, as outlined in the enclosed memorandum, but the convention asked that it be allowed to stand over for another year and the associations given a chance to fully consider and prepare for the change.

From the foregoing you will see that an interesting and important programme is being prepared for the Convention.

The adoption of a quality basis payment for butter and cream will put a premium upon careful, conscientious and intelligent work. It will bring about a gradual and general improvement in dairy methods, improvements in the quality of dairy products, increased market values and correspondingly better returns to the producers. Surely this will be worth while.

The change proposed in the local management of the work of the creameries will give the association full control over the expenditures itemized under sub-heads 1, 2, 3, 4 and 5 of the enclosed memorandum. With a larger scope and greater responsibilities the local administration should make a success of the business. The change will bring the patrons and the management of the creameries closer together, into closer co-operation.

Respectfully yours,

C. MARKER,
Dairy Commissioner.

(ENCLOSURE)

(Memo re proposed change in the administration of some of the work in connection with the operation of the Government Creameries in Alberta.)

It is estimated that the actual cost of keeping the accounts in connection with the creamery work, at the Dairy Commissioner's office, Calgary, will be perhaps a shade over one-half cent per pound of butter handled during the present year and this service has, heretofore, been provided by the Government and paid for out of General Revenue.

Now that the business of the Creameries is upon a good financial basis it is deemed advisable that the cost of accounting should be paid for by the creameries upon a pro rata basis or that the Associations be given the alternative proposition set out below.

In the past the Department has undertaken:

- 1 To engage and pay for all labour required in the operation of the Government creameries.
2. To pay for the collection and delivery of the cream by haulers to the creameries, on the certificate of the buttermaker in charge, countersigned by the Secretary of the Association.
3. To pay for local cartage on butter and supplies between the creameries and the railway stations
4. To pay for repairs and for supplies and furnishings bought locally for use in the creameries, such as ice, fuel, etc.
5. To make advance payments direct to the individual patrons for cream supplied to the creameries at the end of each four-weekly period, and a final settlement after the close of each season's business.
6. To pay for furnishings bought in large quantities such as butter packages, salt, colour, etc., for distribution among the creameries, also cartage and freight charges on such shipments
7. To pay local freight charges and cartage on butter shipped from each creamery to the cold storage warehouse.
8. To operate a cold storage warehouse at Calgary and insure all the butter handled up to the time of sale and shipment.
9. To sell the butter, collect the proceeds and to keep the accounts in connection therewith.

It is suggested, therefore, that in lieu of this half-a-cent per pound charge the administration of the items 1, 2, 3, 4 and 5 be turned over to the Associations, that the periodical advance payments for cream be made direct to them in a lump sum and that the final settlement be made with them in the same manner at the close of the season when all the butter has been disposed of and the cost of the services enumerated under 6, 7, 8 and 9 deducted from the proceeds from the sales of the butter.

The associations with the exceptions of Vermilion, Bonnie Glen, Stettler and Spring Lake acted on the invitation and sent delegates as under:

- The Olds Association, D. L. Stirton and Tom. L. Buckton.
- The Innisfail Association, John Duncan and E. J. Fream.
- The Markerville Association, Chris. Johnston and D. Morkeberg
- The Red Deer Association, J. Comer and E. Carswell.
- The Evarts Association, Sam. Smith and E. S. Hussey.
- The Blackfalds Association, G. L. Gregson and J. Barron.
- The Content Association, E. Allison and A. J. Creighton.
- The Earlville Association, A. C. Hare and W. W. Batson.
- The Ferry Bank Association, Charles Hemeyer and W. J. Hoar.
- The Wetaskiwin Association, James Bradley.
- The Rosenroll Association, F. L. Langston and A. C. Hoover.
- The Viking Association, J. Barker, Sr., and James A. Craig.
- The Daysland Association, C. H. Stokoe.
- The Lake View Association, W. M. Graham and D. Cameron.
- The Conjuring Creek Association, A. J. Sangster.
- The Rimbey Association, F. Symonds and John H. Beeley.
- The Lamerton Association, H. C. Neis and W. G. Merkley.

The Department of Agriculture was represented by the Honourable Duncan Marshall, Minister of Agriculture; George Harcourt, Deputy Minister; W. F. Stevens, Live Stock Commissioner; C. Marker, Dairy Commissioner; Messrs. H. S. Pearson and George W. Scott, Dairy Instructors and F. W. Underwood, convention secretary. E. Michener, M.P.P., and other citizens of Red Deer favoured the convention with their presence, besides several journalists who reported the proceedings for their respective journals.

The convention was opened by the Dairy Commissioner who outlined the programme for the day and invited the delegates to appoint a chairman. On motion of E. J. Fream (Innisfail) and A. J. Creighton (Content), Mr. E. Carswell, president of the Red Deer Butter and Cheese Manufacturing Association and one of the staunch co-operative dairymen of the province was unanimously elected to preside at the convention.

Mr. Carswell having acknowledged the honour and extended a welcome to the delegates on behalf of the town and citizens of Red Deer, expressed the hope that the delegates would apply themselves diligently to the business of the convention, more especially to the consideration of the proposed change in the administration of the local business of the government creameries, as well as to the proposed grading and quality basis payment of the butter and cream.

He called on the Minister of Agriculture to address the delegates and hoped that the new minister would extend the same interest, sympathy and co-operation to the work of the associations as had his predecessor in office, the Honourable W. T. Finlay, who was a regular attendant at the annual conventions.

Honourable Mr. Marshall expressed his pleasure at meeting so many of the men who occupied prominent places in co-operative dairying. He was thoroughly in sympathy with the work they were doing and ready to listen to the advice of the men who were milking the cows and making the butter. He looked upon his department as a co-operative institution and invited the assistance of the farmers of the province to make it of the greatest possible usefulness and value to the people. Dairying had done wonders for the farmers of the older provinces in enhancing the value and fertility of the land and increasing the general prosperity of the people and he believed it would do the same for the land and for the people of Alberta. He would be pleased to listen to the addresses during the afternoon and join in the discussion of the subjects which might be brought up in connection with the work of his department.

The Dairy Commissioner then presented a review of the past year's work of the government creameries, based largely upon the statistical material given in former pages of this report. He gave also a brief outline of market conditions during the year. On the latter subject special reference was made to the comparatively low average price obtained for butter made and sold during the latter part of the winter season 1908-09. (See Table II.) He said that owing to the somewhat peculiar conditions of the butter market last winter the drop in prices which usually takes place in the latter part of May took effect in the month of February. Anyone who had occasion to follow the Canadian butter market (we do not speak of purely local markets now) during last autumn and early winter would observe that the prices were running exceptionally high, too high in fact to admit of any export business; hence the entire autumn and winter butter production of the country had to be used for home consumption, including a large quantity of the summer's make put into cold storage both east and west to meet the expected usual shortage in the winter's output.

Due, however, to a greatly increased butter production during the winter the shortage did not materialize and many firms handling dairy produce, both east and west, found themselves with heavy stocks of high priced butter on their hands and, of course, wanted to clear these stocks before making additional purchases; therefore, the ready and, we may say, regular demand for Alberta creamery butter in the western markets was practically limited to a quantity equal to that which we were able to supply during previous winters. Anything beyond that quite naturally had to be marketed in competition with butter shipped in from other points and selling at from five to ten cents per pound below the price current at the same time a year ago.

In view of these conditions and of the fact that the past winter's butter output from the government creameries alone was more than two and a half times greater than that of the winter of 1907-08, and granting that the same rate of increase applied to all the Alberta creameries it will be seen that the market conditions may properly be termed peculiar and we shall understand the reason why the returns per pound of butter were not as high as the figures reached a year ago.

DAIRY STOCK.

Mr. W. F. Stevens, Provincial Live Stock Commissioner, addressed the convention on the subject of dairy stock. He said:

In an address delivered before you a year ago, I stated that the first requisite of a dairy farm is a dairy man. Since that time I have had many opportunities of observing men and methods and am more firmly convinced than ever of the truth of the statement I made then.

The past year will be remembered in dairy circles as the year when the great demand for the special dairy breeds began.

In compliance with a request of this and other gatherings of farmers and dairymen, the provincial government undertook to bring out in carload lots from the provinces of Ontario, Quebec, Manitoba and Saskatchewan, purebred bulls of the recognized dairy breeds, namely the Jersey, Guernseys, Ayrshires and Holsteins. Under this arrangement there were brought out seven and one half carloads of Ayrshires, one and one half carloads of Holsteins. Just prior to the coming into effect of this arrangement, Mr. C. A. J. Sharman, of Red Deer, imported a carload of Jerseys and in June Messrs. Bull & Son, of Brampton, Ontario, brought out two carloads for exhibition purposes, nineteen head of these were sold in the Province. Mr. J. G. Clark, of Irma, imported several car loads of Ayrshires which were sold at public auction.

In proportion as these animals fell into the hands of dairymen and farmers who understand caring for them they will prove a valuable acquisition to the province.

In my address to you a year ago, I intimated that there were certain persons who should not attempt to keep the special dairy breeds. That a special dairy cow requires a special dairy man to care for her, a special dairy barn and special dairy feed. The man who is not thus equipped had better leave them alone as they would certainly prove to be a disappointment. If in addition to the want of these things the settler has a considerable amount of open range near him, there is an additional reason why he should not take up with the special dairy breeds, but should select a larger type of animals which would yield a fair amount of milk and produce a 1,200 pound steer at three years old.

When a young man, I somehow or other became possessed with the idea that there are some good milking Shorthorns. That this breed of cattle are a good sort for the average farmer to have and from my knowledge of the equipment of the average farmer of Alberta, I am satisfied that there is no animal better adapted to conditions in the dairy sections of the province than the dual purpose Shorthorns.

I know that there is some difficulty connected with getting animals of this type but there are breeders in the province who have not yet destroyed the milk producing powers of their herds by using bulls of the strictly beef type, although they have not figured prominently in the show ring in the past. The Shorthorns when judged in the ring are judged from the beef producing standpoint, and it naturally follows that the dual purpose animal must go down before an animal bred for beef production alone. As both strains of Shorthorns are recorded in the same herd book it is difficult to draw the line between the dual and single purpose animal, and whenever I am asked for the names of one or more breeders of the dairy type, I always mention that the parties profess to breed this type and I also caution the enquirer to be sure to examine the herd and to take especial care to see the dam and if possible both the grand dams of the animal offered for sale. If these show good milking qualities he is reasonably safe in buying. If a little care is exercised in this matter it will be a matter of but a few years when the milk producing power of our herds will be greatly improved and it will be done without greatly decreasing the quantity and quality of the meat produced here.

I do not want anyone to get the idea that I am decrying the special dairy breeds. The farmer who finds his pastures limited, who has sufficient shelter to protect his animals against chilling rains, against flies and mosquitoes and who

understands their nature sufficiently to get the best results from them can safely invest in them and them exclusively; but it is to the man who is not in this position that I am uttering a word of caution.

What action will be taken in 1910 in the matter of further importation of dairy cattle, I am unable to say. That is a matter for you to arrange with the minister. When an arrangement has been made you will find me ready to carry it out. I may add that some complaints have been received from the local breeders of dairy cattle because of the assistance given the dairymen last year in bringing out pure-bred animals. They contend that it is unfair to transport an animal from Quebec or Ontario for less money than they are able to do within the province. In the face of this opposition it will have to be shown that there is an urgent need of a continuance of the arrangement of 1909 or it will be dropped.

At this point a question was asked by a delegate as to why the English dairy cow had not been included among the animals imported.

Mr. Stevens: By the English cow I fancy you mean the dual purpose Shorthorn. This matter was discussed at some length when this subject was under consideration and inasmuch as all Shorthorns are recorded in the one herd book in Canada, no one would care to say that one man's herd was single and the other dual purpose, and the amount of money available forbade importations from the Old Country. I have advised all inquirers on this point that if they can show that there is in England a special herd book for milking Shorthorns; that these animals possess merit sufficient to justify the expenditure of money necessary to secure them; that they are adapted to conditions here and that there exists among the farmers and dairymen a strong desire for them it is possible that an arrangement might be made to secure assistance from the government in securing them, but all of these things will have to be shown before assistance will be given.

An interesting discussion followed Mr. Steven's address.

The chairman next called C. Marker, dairy commissioner, to discuss the subject of—

GRADING AND QUALITY BASIS PAYMENT OF CREAM AND BUTTER.

We intimated in the letter calling this convention that the question of grading and quality basis payment for butter and cream would be taken up for discussion. Briefly, our proposal is that the net proceeds realized from the sales of the butter made in the government creameries should be distributed on the basis of quality, or grade, paying a premium of two cents per pound on all first grade butter.

As this may be considered a somewhat radical innovation we shall, at the outset, explain a few of the terms and principles involved in the proposal and afterwards present for your consideration certain material and facts which form the ground work of the proposition.

The term "grading" is generally defined as "the act of sorting out, arranging or classifying in order according to suitability to the needs of the buyer, quality, size, etc.," and the principle of grading is followed consciously or unconsciously wherever any goods are bought or sold in normal markets, where the supply is at least equal to the demand. In markets where, and when, the supply of any one article or commodity is not as great as the current demand, where the competition is among the buyers, the principle of grading does not for the time being apply with the same force as in cases where, and when, the supply is equal to or greater than the current demand, where the sellers are brought into competition with one another. It is a good policy, however, on the part of the producer or seller to always anticipate the latter condition in the market as in that case the quality article will find a ready demand and sell at a fair price where an inferior product may have to go begging for a buyer at any price.

As already stated, the grading principle and quality basis payment applies in all normal markets, and in a more or less clearly defined manner to all products, including those of the farm and dairy. We shall confine ourselves at present to a study of the latter.

INTRINSIC VALUE AND SELLING PRICE.

The market value, or selling price, of butter is subject to great fluctuations. We find at times a very wide variation in the butter quotations in the same markets, and at the same time. Why?

Why do we find, for instance, that in some markets butter is selling at prices varying from 20 to 40 cents per pound? The intrinsic or actual food value may be nearly or quite as high in one case as it is in another. Why then the great difference in price? Simply this, there is something quite apart from the intrinsic or food value for which the buyer is willing to pay an additional price, or premium

This we call marketable quality. Briefly, apart from sentimental and local considerations the quality of butter or for that matter of any other product or commodity may be measured by its suitability or adaptability to the needs and purse of the buyer. Butter of a uniform colour shade well made and tastefully put up catches the eye of the discriminating buyer and makes a favourable impression upon him; it gives evidence of workmanship and of the exercise of care and skill on the part of the producer. If the flavour of the butter is sweet and pleasant to the taste this favourable first impression becomes reinforced by a desire to buy that particular package or lot. These are the first steps in marketing. If, on the other hand, the flavour does not please him he will look elsewhere or to other brands for the quality suited to his needs. This being true and other conditions equal we find that the flavour is the factor that determines the relative marketable quality of butter.

When the government undertook the supervision and management of a number of co-operative creameries in this province, it also undertook to find markets for their butter output. The marketing has been conducted so far as possible upon a quality basis. During the past four years the butter output of the government creameries handled through the cold storage at Calgary has been systematically inspected and scored for quality. A system of marking the packages put up at each creamery makes it possible to identify each churning and to secure representative packages for inspection and scoring.

At the close of each season the results of the scoring are summarized showing the relative standing of the several creameries.

BUTTER SCORING CONTEST.

A few years ago it was my privilege to recommend to the Honourable the Minister of Agriculture that certain prizes consisting of a challenge trophy, a gold and several silver medals be awarded by the Department to the buttermakers in the province who participated in our butter scoring contest and sent in the best and most uniform quality of butter throughout the whole season. This recommendation received the minister's approval and the contest was inaugurated for the express purpose of improving the marketable quality of the butter output of the creameries. The buttermakers entered into the contest with a spirit of enthusiasm and determination to do their very best.

In summarizing the results of each season's scoring contest we found very little difference in point of workmanship of the butter from the different creameries; by the term workmanship we mean the "texture," "colour," "salting," and "packing" of the butter, all of which is largely under the control of the buttermaker, but we found considerable difference in the flavour of the butter of individual churnings from each creamery as well as of individual creameries in the whole group.

The flavour in butter is the quality which determines very largely its selling value on the market and under the present system of handling the cream deliveries the question of flavour is practically beyond the control of the buttermaker.

The season's scoring contest during the last few years has demonstrated that there are certain creameries in the group which are always at the top of the list in point of general quality and particularly flavour, consequently the butter from such creameries is worth more money on the general market than that from those which are further down the list. This of course, we knew but our problem was to assist those with the lower scores up higher through an improvement of the quality of the butter.

With a view to formulating some line of action in that respect we undertook, at one of the large creameries to conduct a preliminary survey during the season of 1909.

The flavour of the cream furnished by each patron from time to time was carefully noted and recorded for a period of several weeks and it was found that some patrons sent cream of a choice quality all the time, others sent good cream sometimes and poor cream sometimes, and others again sent badly flavoured cream all the time, showing that in the final analysis the quality and therefore the value of the butter made in any creamery rests largely with the individual patron. This being the case, if by improving the general quality of the butter output of any creamery we can also increase its selling value, it follows that the patrons may collectively receive more money for their cream if they improve its quality.

In order to properly emphasize this point, we decided to advocate the distribution of the net proceeds from the sales of the butter from the different creameries on the basis of marketable quality and proceeded to agitate this question among the creameries and among the patrons as well.

We quote the following from circulars mailed in the autumn of 1909 to some 1,500 patrons of the Government creameries in the province, calling attention to this matter.

(Extract from the first circular on the subject.)

"It will interest you to learn that we are about to institute a system of grading the cream supplied to the creameries by the individual patrons. This grading system will undoubtedly lead up to the payment of a premium on the cream which is delivered in the best condition and also to the placing of the inferior grades where they belong in the price scale, viz., at the bottom.

"We hope to have all arrangements completed in a few days to begin the grading. A permanent record will be made of the classification of the samples, so it will be possible to point out the patrons who are doing their utmost to help establish a uniformly fine quality of butter and to reward them accordingly. On the other hand, the record will point out the individuals who make no effort in that direction. The grades for cream will be as follows:

- "1st—Sweet, clean flavour and uniform consistency.
- "2nd—Sour, clean flavour and uniform consistency.
- "3rd—Anything which will not grade as above.

(Extract from the Second Circular.

"An announcement was made in a former circular that a system of cream grading would be instituted at the creameries and the grades were defined under 'First,' 'Second,' and 'Third.' While it is not the intention to take these grades as a basis for payment this year nor before the Association and patrons have had a chance to fully consider the whole question and express their approval thereof, yet the grading is now being done at the creamery and a mass of information bearing on this point is being collected and will be presented to the patrons in due course.

"You may have given this proposition considerable thought, possibly discussed it with some of your neighbours and found some weak spots in it. If you have, I shall be glad to receive a letter from you outlining the principal objections which in your opinion can reasonably be made against the principle of grading the cream samples at the creamery and afterwards making the grade a basis for payment of a premium on the butter made from good, wholesome, clean flavoured cream. This will mean, of course, that the patron who supplies second or third grade cream will not get as high a price per pound of butter or butterfat as the patron supplying first class cream.

"Let us have your opinion, advice and criticism. The proposed grading system is calculated to raise the standard of quality of Alberta creamery butter and to suitably reward the patrons who are the backbone of the creamery industry, who do their share of the work conscientiously and well.

We also quote from a circular letter mailed in August, 1909, to the butter-makers of the government creameries.

Grading of Cream.

"I enclose copies of Form D. 6 B and desire you to undertake a systematic examination and grading of the cream furnished by the patrons of your creamery. The object of this new work is to bring about a further improvement in the quality of the cream supplied to, and the butter made at, your creamery.

"Under the present system of cream collection by haulers the grading of the individual lots of cream must necessarily be based upon an examination of the samples brought to the creamery in the sample jars; these should, therefore, be thoroughly clean and dry before the samples are put into them or the grading is apt to prove misleading and worthless.

"The examination of the samples may be made for flavour and consistency as you make up the composite samples for the Babcock test, but in order to bring out prominently and uniformly the characteristics of the samples, they should all be warmed to, and examined at, a uniform temperature of 98 to 100 degrees Fahr.

"If you cannot manage at present to grade all the samples begin on some of the routes from which the poorest cream is brought in, and keep at it until you know the individual patrons who seem to need special attention. The more ground you can cover thoroughly in this new work the better.

"It is not the intention to make any change in the present method of distributing the proceeds from the sales of the butter without the knowledge and approval of the Association, reached after a thorough explanation and discussion of the whole question, but in the meantime we shall collect material upon which any recommendation for a change will be based and to this end I have asked you to take the work of grading in hand as far and as thoroughly as you are able for the remainder of the season.

"A glance at the butter score cards and summaries which we send you from time to time will amply convince you that there is need for improvement in the flavour and condition of the cream supplied to our creameries.

"Moral suasion has been used for years in generous quantities, but, with a few exceptions, without material results. The dollars and cents argument will be tried next and should show results more quickly, if made on a basis of fairness and justice to all."

Considering that less than half a dozen letters containing objections and criticism were received from patrons in answer to the circular, we may assume that the plan outlined appealed to the great majority of them as being fair and generally satisfactory.

The criticisms received may be grouped under the following heads, viz.:—

- (1) The cream haulers are not competent to grade the cream.
- (2) The patrons living a long distance from the creamery will be placed at a disadvantage in that his cream will deteriorate in transit more than the cream of the patron who lives but a short distance from the creamery.
- (3) It cannot be done.
- (4) The grading of the cream would drive our patrons away from the creamery.

In answer to the first objection we may say that it is not our intention that the cream haulers shall do the grading. They merely take the samples and afterwards deliver them. It should be the duty of the buttermaker at the creamery to do the grading.

Objection number two does not hold good, either, as has amply been proved by the results of the preliminary grading work done during the past season at all the creameries, where the cream and samples received reasonable care in transit.

The third objection is as "old as the hills," but it is not convincing.

As to criticism number four, if the fear expressed there turns out to be true it will certainly be a serious matter. But, does it look reasonable? Which class of patrons would be driven away by the adoption of a system of payment which recognizes in a practical and material way the quality article? Surely not the quality patrons who are to benefit by the change. Eliminating the quality patrons we have left the other class. Where would they go?

The logical assumption will be that they will patronize the creamery that can pay them the best price for their cream. This end they can attain by getting into the quality class, and they will, ultimately.

With regard to the buttermakers in charge of the creameries. I am particularly pleased to acknowledge the readiness, interest and enthusiasm with which they took up this additional work, no small task by any means. Without their loyal co-operation we would not have been in a position to place this proposition so confidently before you now, based as it is purely on local conditions and practical experience.

It is quite natural that a radical move such as this should excite both curiosity and discussion among the patrons and there is no doubt that all the objections and real as well as fancied weak points in the scheme were duly overhauled from time to time. The quality patrons, however, who had been in the habit of sending sweet, clean flavoured well cared for cream naturally approved of the idea of eventually receiving a premium for quality and they became the very strongest advocates of a grading system.

Creameries are some of the very few commercial institutions whose quality patrons have been satisfied to lose a portion of their legitimate income or profit in order to bonus the carelessness or indifference of others, and we do not often hear of the man who produces a really first class marketable product who is willing, or in the long run satisfied, to go "snooks" with his careless neighbour in the marketing of his products.

Now that there appeared to be a chance of the quality patrons getting into their own they encouraged the movement as in the past they have championed the principles of properly equipped creameries, efficient service in field and factory, correct sampling and testing methods and clearly detailed business like statements of returns. Such people are not likely to continue in an old groove when there are better, fairer, yet workable methods available.

Let us see, now, how the premium principle would work out if applied to the past season's butter output of the creameries participating in the scoring contest.

The score summary shows that in the matter of flavour 64½ per cent. of the butter reached or exceeded the point at which the division was made between "first" and "second" grade and we have seen that the average price of 23.93 cents per pound was obtained for the season's butter. (See Table IV).

If, supposing, we set aside a premium of 2 cents per pound for the portion grading "first" we shall have a rate of 22.64 cents per pound for "seconds" and, adding to this the 2 cents per pound premium, 24.64 cents per pound for "firsts."

TABLE IV.—GRADING OF BUTTER, ALBERTA GOVERNMENT CREAMERIES, SEASON 1909.

No. of Creamery	BUTTER OUTPUT			VALUE IN CENTS PER POUND	
	Per cent. Grading "First"	Per cent. Grading "Second"	Total	Uniform Rate Cts.	2 Cent Premium Rate Cts.
1.....	90 2	9 8	100	23.93	24.44
2.....	90 1	9 9	100	23.93	24.44
3.....	84.9	15 1	100	23.93	24.34
4.....	77.7	22 3	100	23.93	24.19
5.....	76.9	23 1	100	23.93	24.18
6.....	69.9	30.1	100	23.93	24.04
7.....	57.9	42 1	100	23.93	23.80
8.....	55.6	44.4	100	23.93	23.75
9.....	55.3	44.7	100	23.93	23.75
10.....	48.1	51.9	100	23.93	23.60
11.....	45 3	54.7	100	23.93	23.55
12.....	42 8	57 2	100	23.93	23.50
13.....	38 6	61.4	100	23.93	23.41
14.....	37 3	62.7	100	23.93	23.38
15.....	33 6	66.4	100	23.93	23.31
16.....	30.3	69.7	100	23.93	23.25
17.....	29.4	70 6	100	23.93	23.23
18.....	23.2	76 8	100	23.93	23.10
19.....	17.3	82.7	100	23.93	22.98
20.....	11 3	88.7	100	23.93	22.86
21.....	9.3	90.7	100	23.93	22.82
Averages	64.5 (24.64)	35 5 (22.64)	100	23.93	23.93

We are well aware that the rate of the premium, *i.e.*, 2 cents per pound, may be open to discussion and a difference of opinion, but taking into consideration the rates paid in similar cases elsewhere, the range of quotations given in the principal dairy markets and our present knowledge of their requirements, we are of the opinion that the factor of 2 cents is fair to all concerned; more particularly, perhaps, to the lower grades. When we realize that quality counts for much in the markets to which the Alberta creameries cater, does it seem fair that the creamery heading the list with 90 per cent. of "firsts" and the one found at the bottom of the list with but 9 per cent. of "firsts" should receive the same price for their butter? Certainly creamery No. 1 will not consider it fair and its patrons would have just grounds for a vigorous objection to the "pooling" of the proceeds. So would the patrons of several other creameries.

The creameries whose butter output finds its way into "firsts," largely, are for that reason the backbone and mainstay of the whole group when it comes to finding and holding quality markets. They have just grounds, therefore, upon which to base a demand for a quality basis of payment. I believe we all agree on that point.

Another consideration enters here, however. We see that the creamery lowest in the scale had a certain proportion of "firsts" showing that at least some of its patrons has been imbued with the "quality" spirit and supplied first grade cream, no doubt quite as good and as well cared for as the cream supplied by the best patrons of the creamery that stood at the head of the list. This being the case, these patrons should be entitled to receive the same price as the latter, yet if the principle of grading and quality basis payment be not extended beyond the settlement with the creameries, as units, for their total butter output these quality patrons of the creamery standing at the bottom of the list would not be justly dealt with; hence the grading and quality basis payment should be extended to the cream furnished to the creamery by the individual patrons.

THE "POOLING" SYSTEM OF PAYMENT.

In the past it has been the practice to "pool" the proceeds for all butter sold from the Government creameries through the cold storage warehouse at Calgary and to pay the patrons of each creamery the average price obtained during each period of the season, less the cost of freight on the shipments to Calgary and purely local charges. With possibly a few exceptions this has been the general procedure followed by all the creameries in the west and in defence of this system it is being

urged, in some quarters, that it is up to the creamery managements to manufacture a first class quality of butter from the cream received, as they generally reserve the right to reject any cream which is not fit to be made into first class butter.

This contention looks plausible, but anyone who knows the conditions under which business is conducted at and by the majority of creameries will understand that it is not practicable to carry out the full intent of that provision as the result would be that a number of patrons would find themselves without the market which the establishment of the creamery was intended to provide.

We are told that "infant industries," which many creameries admittedly are, should be encouraged in every possible way rather than discouraged by the prospect of having to accept lower prices for the inferior portion of their butter output, an effect which the quality basis payment certainly would bring in its train.

As for encouraging infant industries it would seem that no better encouragement can be given than the prospect of their getting a good market and fair price for the product manufactured. We have already seen that the price level paid for butter in any normal market is very largely governed by its quality. This being the case what better encouragement could be given than a quality basis of payment?

THE QUALITY PATRON.

The patrons of creameries may be divided broadly into two classes. One class is represented by the man who looks and works for thoroughness and quality in anything he undertakes, for quality sake. He, being a quality man, would not do a slipshod piece of work. A man of this description is generally the backbone of any industry or movement with which he identifies himself. He may not have all the conveniences and facilities which he desires, but in the meantime he is determined to make the very best use of what he has. While he is producing quality for its own sake he also knows that sooner or later his market will recognize the merit of that which he has to sell and pay him accordingly. To quote a prominent commercial publication:

"The passion to manufacture and sell the best has inspired every big figure in trade and industry. These men reached giants' stature because for once creative impulse and hard commercial sense pointed to the same goal. To cut cost, to improve processes, to get an increasingly finer product from an unchanging raw material, is good business as well as the only man's game worth playing. The prize is quality. Quality begets success. More, it is success."

THE INDIFFERENT PATRON.

Then we have the indifferent patron who lacks the technical knowledge, ambition or *will* to do the share of work which may be fairly expected of him by the creameries aiming for quality. He does not understand, nor does he appreciate, the meaning of the word *quality*. In these days of excellent and low priced agricultural literature, Farmers' Institute work, special dairy meetings, etc., there is no reason why any dairyman should remain ignorant of the first principles underlying successful dairying. If ambition or will power is lacking purely moral suasion is ineffective as a "bracer." He may smilingly condescend to listen to arguments and suggestions and mentally agree to let the other fellow follow them, as for himself it is usually too much trouble. This class of man can only be reached by financial arguments in the form of dollars and cents, arguments which quality basis payment will drive home. When the dollars and cents argument is applied he will generally "sit up and take notice." Chances are that he may eventually become a quality man, if not just for quality's own sake then for the sake of the additional dollars and cents which will find their way into his pockets as a practical result. Hence, the adoption of a quality basis payment will act as an encouragement to the quality man and an effective spur to the other. Will this not be worth while?

DEFINITION OF GRADES OF CREAM.

In defining the grades of cream we must be guided largely by local conditions and make the grades so few and broad and clear that all the patrons will readily understand what they mean. Instead of using three grades, as originally proposed, we now believe that two will be more satisfactory at the beginning.

The following definitions, it is considered, will be sufficient for present requirements and if the buttermaker in charge of the creamery be competent to make first class butter he is also competent to properly and equitably place the grades on the cream.

First grade: Cream, preferably sweet, from which first class butter can be made by a competent buttermaker. The flavour to be clean and fresh, and consistency smooth and even.

Second grade: Cream, sour or sweet, which is slightly stale or old, or bitter in flavour but of a smooth and even consistency.

Cream, which is not clean, which is lumpy, very stale or old, bitter or musty, in flavour should not be accepted.

In order that the creamery patrons, who, as we have said, are interested parties, may become familiar with the grading system in use at the creamery it is advisable that arrangements be made to have them visit the creamery occasionally and take part in the grading. This will apply particularly to the patrons, who, as a rule, supply cream of an inferior grade. It is by comparison that we learn and if such patrons be given an opportunity to examine and compare a few samples they will soon learn not only what is understood by first grade, but they will also learn from the buttermaker how they, themselves, may be able to produce and handle their cream so as to get it into the premium class.

SAMPLES FOR GRADING.

At some creameries the farmers deliver their cream individually or form small clubs in each neighbourhood to take turn about and bring the individual patron's cans into the creamery. This is the ideal system and has much to commend it. It enables the buttermaker to keep in constant touch with his patrons and where the right relations exist his criticism and suggestions regarding the production and handling of the cream will be received in the proper spirit and very likely acted upon. In such creameries the buttermaker has also personal control of the weighing, testing and grading of the individual lots of cream received.

The next best system of cream delivery is that of organizing regular cream routes and employing a collector to call at the house of each patron on his route on stated days of each week and pick up his cans of cream. On the collector's arrival at the creamery the buttermaker will weigh, sample and grade the cream from each patron's cans. The principal disadvantage of this system is the absence of the personal relation between the buttermaker and patrons referred to in the foregoing paragraph. Under this heading we may consider also the cream shipped in by rail in individual cans. While the element of personal contact between the patrons and buttermaker or creamery managers is lacking, yet the responsibility for correct weights, grades and tests may be fixed upon the latter.

In cases where the cream is collected from the patrons by cream haulers and poured into large carrying cans on the wagons the samples which are taken and brought to the creamery for testing purposes are also to be used for grading each delivery. It is important, therefore, that the samples should be thoroughly representative in point of richness but they should also reach the creamery in practically as good physical condition as the bulk of the cream from which they are taken and any material rise in the temperature of the samples should be avoided.

This brings up the problem of devising some inexpensive, yet efficient method for keeping the initial temperature of the samples fairly constant while in transit, even during the warm summer months.

In this connection the use of insulated sample cases have been suggested, with ice as the cooling medium, but a serious weakness in this method lies in the fact that it is not always practicable or convenient to secure ice or to replenish it in the sample cases along the cream routes. Insulated boxes without any cooling medium would be of very little use.

Water, however, is obtainable at every farm house and is in itself a good cooling medium if properly used.

COOLING SAMPLES BY EVAPORATION.

The evaporation of water from a body lowers its temperature by the withdrawal of some of its heat. This is a phenomenon familiar to all who have been caught out in the rain, even on a warm day without any umbrella or rain coat. So long as the clothes, the covering of the body, are damp a certain amount of evaporation goes on and this is responsible for the chill experienced by the body inside which has to yield up some of its heat in the process.

Applying this principle to the cases used for carrying cream samples we merely have to provide them with (1) "clothing," *i.e.*, a covering material which will readily absorb water; and (2) "rain," *i.e.*, keeping the covering wet so long as we want the contents of the cases kept cool by evaporation. The warmer and drier the surrounding atmosphere is the more rapid will be the evaporation and the lower the temperature inside the cases.

Preliminary tests of this principle applied to the sample cases were made by placing two cases containing samples of cream over a steam boiler where the temperature was close to 100 degrees Fahrenheit. The samples in both cases were identical and had an initial temperature of 54 degrees. One of the cases (No. 1) had no outside covering of any kind and the other (No. 2) was covered with several thicknesses of burlap thoroughly soaked in cold water once every hour for the first three hours.

In the first test the temperature of the samples in case No. 1 had risen 42 degrees in six hours, while the temperature of the samples in case No. 2 had risen only 10 degrees.

In the second test, case No. 1 covered with four ply of burlap soaked once every hour for the first three hours in water at 40 degrees, showed a rise of only four degrees in six hours, and another case covered with two ply of burlap only, but otherwise treated the same as No. 1 showed an increase of seven degrees in the temperature of the samples.

Several other tests of a similar nature were conducted with practically identical results.

Our experience gained in making these tests under somewhat severe conditions (atmospheric temperatures of up to 100 degrees) and our common knowledge of the theory of evaporation appear to justify the following conclusions:

1. That it is possible for the cream collectors to carry in the wooden boxes, ordinarily used for that purpose, and to deliver at the creamery their test samples in practically the same condition as the bulk of the cream from which they were originally taken, provided that the boxes be kept enclosed in three or four thicknesses of wet burlap or sacking exposed to the atmosphere en route.

2. That the samples of the patrons' cream collected first may be kept cool and delivered to the creamery in practically as good condition for grading purposes as the samples of the cream supplied by patrons living nearer the creamery.

We have here described a method of carrying and caring for the cream samples from the patrons to the creamery and we believe it will answer the purpose very well. It is fairly efficient, being capable of preventing any material rise in the initial temperature of the samples for a number of hours under all ordinary conditions.

It is inexpensive in that the present sample boxes may be used, requiring only the addition of the necessary covering for which even old bags will answer.

It is practically automatic in its effect, requiring but to be kept wet en route. The patrons will no doubt be pleased to furnish an occasional dipper of water to the cream hauler so that he may keep his samples cool and deliver them to the creamery in good condition for grading.

METHODS OF GRADING.

The grading of the dairy products in the sense in which we use the term in our present discussion is done by the aid of the physical senses, sight, touch, taste and smell.

The physical senses may be developed by practice to such a degree that they can be trusted to accurately serve their possessor. I would strongly emphasize the word practice, intelligent practice; they offer the advantage of being generally available when wanted and the further advantage of being possessed by the creamery patrons who are interested parties to the grading system. If the buttermaker can show his patrons what is meant by "off flavours" on cream, as well as tell them how such "off flavours" may be overcome and avoided altogether he is likely to have less trouble on his hands than the man who tries to "prove" his case purely by chemical tests more or less involved, especially if he is not sufficiently familiar with their principles to satisfactorily explain them to the patrons. I said the patrons are interested parties in the business of the creamery they patronize. They look upon the creamery as their best market for cream and if by intelligent co-operation they as well as the creamery can make better returns for their products of material and skill by the addition of a little more skill they will be willing and glad to co-operate.

SUMMARY.

Briefly, the foregoing discussion may be summarized as follows:

- (1) There is no demand for inferior butter in normal markets except at a price considerably lower than that paid for the quality article, and then in limited quantities only. Quality is remembered after the price is forgotten, it stimulates demand and increases consumption.

- (2) The introduction and application of the proposed grading principle in the creamery business is not intended to encourage the turning out of several different grades of butter but to materially raise the general standard of quality and to enable all the creameries to obtain the premium in the form of a higher average price for their butter. It is merely the means to an end, and this is truly a case where "the end justifies the means."

- (3) The application of the proposed system of grading and quality basis payment for cream will gradually and generally improve the quality of the cream supplied to, and the butter made in, our creameries. It will create and stimulate a demand for their butter in the best and most discriminating markets and secure for the patrons the best possible returns.

In asking you to endorse on behalf of the Associations you here represent an innovation in the business of the creameries which will undoubtedly be far reaching in its effects we believe that we have shown to your satisfaction that this innovation will in no way be prejudicial to the business success of any creamery, that it is eminently fair to all concerned and that it is practicable.

We therefore recommend that for the ensuing year—

(a) The net proceeds from the sales of the butter from the government creameries be distributed on the basis of the grading system outlined, allowing a premium of two cents per pound for all butter grading "first."

(b) The proceeds so distributed to each creamery be redistributed among the patrons on the basis of the grading of their cream with a two cents per pound premium for the butter fat contained in the cream grading "first," after making the necessary deductions for cost of manufacture, cream hauling, etc., and that the premium be included in the advance payments.

A lively discussion followed in which the majority of the delegates took part. Several points, especially with regard to the objections and criticisms referred to in the address, were more fully developed. It was evident that the delegates had given the grading question a good deal of thought and also to some extent tested the sentiments of the patrons towards it.

Their unanimous approval and recommendation is expressed in resolutions numbers 2 and 3, following.

LOCAL MANAGEMENT OF CREAMERIES.

Mr. George Harcourt, Deputy Minister of Agriculture, introduced the discussion of the proposed change in the local management of those of the government creameries which were clear of debt. He pointed out that while the department was very glad to assist the creamery work in every practical way yet he considered that the time had now come when a number of the associations could well undertake a larger share of the local management of their creamery business, not only in order to become familiar with the details of the business end of the work but also that they might prepare to eventually take full control as originally intended when the department took charge of this work. He said that after the discussion at last year's convention the delegates and the associations had undoubtedly gone into the matter locally and would be fully prepared for the change.

It was pointed out also that at the beginning of the season 1909 the association at Blackfalds undertook the entire local management in connection with their creamery, the department disposing of their butter output. The representatives of that association were present and would make a statement for the benefit of the convention as to how they liked the change.

Messrs. J. Barron and G. L. Gregson, president and secretary-treasurer respectively of the Blackfalds Creamery Association, expressed their entire satisfaction with the plan. They found that it was possible to get the patrons' cream cheques out more promptly after the end of each month and keep in closer touch with the patrons and the field work generally. They would not care to go back to the former system.

The memorandum enclosed in the letter calling the convention was discussed point by point and the delegates declared themselves in favour of the associations taking up a larger share of the local administration provided the government would continue the marketing of the butter, as heretofore.

RESOLUTIONS.

The resolution committee consisting of Messrs. Fream, Duncan, Creighton, Cameron and Morkeberg presented its report, and the following resolutions were adopted:

1. Having heard the explanation of Mr. Harcourt in regard to the changes proposed in the local management of the Government-operated creameries we do recommend that all creameries now in a position to do so should accept the proposed new agreement. We would further recommend that arrangements be made by the department so that any creamery association not yet self-supporting can undertake this new work upon the association entering into an agreement with the department to allow a nominal assessment per pound of butter or any other satisfactory agreement to be made to pay off the indebtedness.

2. This convention recognizes the importance of the grading of cream and of settling for same on the basis of a premium for first grade, and further we recommend that as far as possible this system be adopted by all creameries on the basis outlined.

3. That this convention agrees to the plan of grading butter at a premium for first grade and recommends that in future all creamery associations be paid at the rate per pound earned by them on the quality of the butter as determined by the department.

4. Whereas this convention has recommended the adoption of the scheme for the local working of the creameries, we wish to place on record our regret at the apparent desire of the government to withdraw from the co-operative creamery system, and we firmly believe that the future welfare and prosperity of the co-operative creamery business lies in the assistance of the government, and in the matter of sales especially remaining in the hands of the Dairy Commissioner; we also wish to place on record our appreciation of the remarks of the Hon. Duncan Marshall that as long as the creamery associations request the services of the government in this matter, and he is the head of the department of agriculture, they will be given, and we assure him that we will take advantage of his offer.

5. Whereas the convention of creamery delegates held at Red Deer in April, 1909, passed resolutions recommending stricter regulations of all creameries and cheese factories and no action has been taken on same this convention do hereby reiterate the said resolutions and do recommend to the Hon. the Minister of Agriculture that regulations be passed providing for the licensing of all creameries and cheese factories, the issuing of permits to erect new creameries or cheese factories by a representative council, the issuing of detailed statements showing butter fat, moisture, basis of payment and all other information that may be required, government inspection of manufacturing and sanitation, and providing that the books of all creameries and factories shall be open to patrons at all times during business hours.

6. Whereas the present system of allotting shares has resulted in shares being issued to former patrons who have left the district and these shares are now being carried on the books of the associations, thereby causing a large amount of unnecessary labour, we do hereby request the Minister of Agriculture to bring in an amendment to The Dairymen's Act, giving associations power to cancel any shares whether fully paid up or otherwise, in the event of the said shareholders not registering their proper address within five years after the allotting of said shares and after advertising the names of said absentee shareholders at least three times in a local newspaper and once in the official Gazette of the Province.

7. Whereas it is a well-known fact that a large quantity of dairy butter sold over the counters in the stores is under weight and the Dominion laws governing same do not seem to be well known, we recommend that an amendment be placed in the Dairymen's Act providing that all pound prints made up and put on the market must be of full weight and providing for penalties for the non-fulfilment of this provision.

8. This convention places on record its appreciation of the services and assistance rendered to the creamery industry by the Minister of Agriculture and his staff, more especially Mr. C. Marker, Dairy Commissioner, whose splendid work has done so much to build up the dairy industry of the province.

CHANGE IN WORKING AGREEMENTS.

In order to meet the requirements of each case the department had drawn up four different plans of operation, as embodied in the four following forms of working agreements, and submitted to the respective associations:

DEPARTMENT OF AGRICULTURE

(Agreement No. 1.)

MEMORANDUM OF AGREEMENT.

BETWEEN: (*Name of Association*)

and

THE DAIRY COMMISSIONER, ACTING FOR THE DEPARTMENT OF AGRICULTURE FOR THE
PROVINCE OF ALBERTA.

1. The.....
(hereinafter called the Association) agrees to provide suitable buildings and premises fully equipped for the manufacture of butter and a sufficient supply of pure water and good drainage, all to the satisfaction of the Dairy Commissioner, for carrying on the business of manufacturing butter at.....
in the Province of Alberta.

2. The Association guarantee a cream supply to the creamery from at least four hundred cows for a period of not less than five months per year.

3. The Association agree to give and assure to the Department of Agriculture free and undisturbed possession of the creamery buildings, premises and plant for a term of not less than one year from the first of May, 1910.

(2) Any charge or claim on the buildings, premises or plant, on behalf of any person or persons whatsoever is not to be considered as a claim on the Department of Agriculture.

4. The Association, through its Board of Directors, agree to use all reasonable means to promote the interests of the creamery and to secure persons who will furnish a supply of cream in accordance with the rules and regulations attached to, and forming a part of, this agreement.

5. The Association agree that the cream shall be delivered at the creamery free of charge to the Department of Agriculture and that the cream shall be delivered by, or collected from, each patron such number of times each week as may be required by the Dairy Commissioner.

6. The Association hereby authorize the Dairy Commissioner from time to time to provide on its behalf and at its expense any addition to the buildings, equipment, water supply and drainage not in the nature of repairs which he may consider necessary for the dispatch and efficiency of the work of the creamery.

7. In consideration of the foregoing, the Dairy Commissioner agrees to manufacture from the cream which may be accepted at the creamery a first class quality of butter.

(2) The right to reject any cream which he considers unfit for making into a first class quality of butter is reserved to the butter maker in charge of the creamery and his judgment and decision in the matter shall be final.

8. The Dairy Commissioner agrees to market the butter to the best of his judgment and ability and to pay the persons supplying the cream the net proceeds realized from all sales of butter and buttermilk, in proportion to the quantity of butter made from the cream furnished by each, after deducting—

(1) The actual cost of manufacturing, accounting and care of the butter in cold storage until it be finally disposed of. This charge is not to exceed four cents per pound of butter.

(2) Any charge which the Board of Directors of the Association may direct to be paid for the delivery of cream to the creamery; and

(3) Such further charge or assessment as may be made on the manufactured butter for the purpose of a loan fund or a local working fund, or both, as set out in Section 12 and 13 of this agreement.

9. The Dairy Commissioner agrees to pay to the said persons supplying the cream, severally, every month, such advances as he may estimate to be about two-thirds of the net value of the cream supplied by them or each of them.

(2) Such advance payments shall be made in even dollars, and no advance payment shall be made for less than two dollars.

10. The Dairy Commissioner agrees to provide the labour, fuel, ice, packages and all other furnishings which are necessary in the operation of the creamery, to arrange for the necessary transportation of butter and sundry supplies between the creamery and the nearest railway station, and to care for the butter in cold storage until it is sold and shipped from.....or Calgary.

11. The Dairy Commissioner agrees to insure the butter against loss by fire, as trustee for, and on behalf of, the persons supplying the cream, to the amount of two-thirds of its estimated market value, but the creamery buildings, premises and plant are to be insured by the Association on its own behalf, and the Depart-

ment of Agriculture is not to accept or have any responsibility or liability in that connection. In any case in which the Association is indebted to the Government the premium receipt or any renewal receipts for such insurance shall be sent to the Dairy Commissioner.

12. For the season 1910 the loan fund charge shall be.....per pound of butter manufactured, said charge to be applied as follows:

- (1) On the repayment of any loans heretofore or hereafter obtained by the Association from the Government.
- (2) In payment of plant and equipment supplied, or which heretofore may have been supplied and installed by the Government the property in which said plant and equipment is to remain in the Government till it is paid for.

13. The local working fund charge shall not be more than.....cents per pound of butter manufactured and shall be applied as follows:

- (1) Towards the payment of an annual rental for the plant and equipment furnished, or heretofore furnished, by the Government reckoned at the rate of three per cent. of such portion of the cost of the plant and equipment as is unpaid, such rental to be computed on the first day of January following the year in which such plant and equipment, or any portion thereof, is installed, and on each first day of January subsequent thereto (or subsequent to the year in which such plant and equipment has been installed if it has been installed prior to the date hereof); but no deduction shall be made from such rental by reason of the receipt of the whole or any part of the purchase price of such plant and equipment before the end of the year in which the rental is so computed.
- (2) Towards the payment of the interest upon loans made by the Government, upon mortgage security or otherwise.
- (3) Towards the payment of interest on loans obtained from any other person or corporation than the Government.
- (4) Towards the payment of a dividend of not more than.....per cent. per annum on all paid up stock in the Association.
- (5) To provide for the insurance, taxes, up-keep and depreciation of the property of, and for such other charges as may be authorized by, the Association.

14. Provision is to be made for the issuing of paid up shares in the Association to the persons supplying cream to the creamery in proportion to the amounts paid in by them severally to the loan fund, as set forth in Section 12 of this agreement.

15. The Dairy Commissioner agrees to keep the creamery building and plant in a good state of repair, ordinary wear and tear, damage by fire, lightning, tempest and other casualty excepted.

Dated at.....this.....day of.....A.D. 1910.

Witness:
President of the Association.
 Witness:
Secretary of the Association.
 Witness:
Dairy Commissioner.

(Agreement No. 2.)

MEMORANDUM OF AGREEMENT.

BETWEEN: (*Name of the Association*)
 and

THE DAIRY COMMISSIONER, ACTING FOR THE DEPARTMENT OF AGRICULTURE FOR THE PROVINCE OF ALBERTA.

1. The.....
 (hereinafter called the Association) agrees to provide suitable buildings and premises fully equipped for the manufacture of butter and a sufficient supply of pure water and good drainage, all to the satisfaction of the Dairy Commissioner, for carrying on the business of manufacturing butter at.....in the Province of Alberta.

2. The Association guarantee a cream supply to the creamery from at least four hundred cows for a period of not less than five months per year.

3. The Association agree to give and assure to the Department of Agriculture free and undisturbed possession of the creamery buildings, premises and plant for a term of not less than one year from the first of May, 1910.

(2) Any charge or claim on the buildings, premises or plant, on behalf of any person or persons whatsoever is not to be considered as a claim on the Department of Agriculture.

4. The Association, through its Board of Directors, agree to use all reasonable means to promote the interests of the creamery and to secure persons who will furnish a supply of cream in accordance with the rules and regulations attached to, and forming part of, this agreement.

5. The Association agree that the cream shall be delivered at the creamery free of charge to the Department of Agriculture, and that the cream shall be delivered by, or collected from, each patron such number of times each week as may be required by the Dairy Commissioner.

6. The Association hereby authorize the Dairy Commissioner from time to time to provide on its behalf and at its expense any addition to the buildings, equipment, water supply and drainage not in the nature of repairs which he may consider necessary for the dispatch and efficiency of the work in the creamery.

7. In consideration of the foregoing, the Dairy Commissioner agrees to manufacture from the cream which may be accepted at the creamery a first class quality of butter.

(2) The right to reject any cream which he considers unfit for making into a first class quality of butter is reserved to the buttermaker in charge of the creamery, and his judgment and decision in the matter shall be final.

8. The Dairy Commissioner agrees to market the butter to the best of his judgment and ability, and to pay the Association for distribution among the persons supplying the cream, the net proceeds realized from all sales of butter and buttermilk, in proportion to the quantity of butter made from the cream furnished by each, for the cost of cream collection and delivery and of local administration after deducting:

(1) The actual cost of manufacturing and care of the butter in cold storage until it finally be disposed of. This charge is not to exceed three and one-half cents per pound of the butter.

(2) Such further charge or assessment as may be made on the manufactured butter for the purpose of a loan fund or rental and interest charge, or both, as set out in Sections 12 and 13 of this agreement.

9. The Dairy Commissioner agrees to pay the said Association on each shipment of butter as received by him into cold storage at Calgary such advances as he may estimate to be about seventy-five per cent. of its net value, less the deductions for loan fund and interest as set out in Sections 12 and 13 and to pay the balance due on such sales after the season's butter has been disposed of.

10. The Dairy Commissioner agrees to provide the labour, fuel, ice, packages and all other furnishings which are necessary in the operation of the creamery, to arrange for the necessary transportation of butter and sundry supplies between the creamery and nearest railway station, and to care for the butter in cold storage until it is sold and shipped from to Calgary.

11. The Dairy Commissioner agrees to insure the butter against loss by fire, as trustee for, and on behalf of, the persons supplying the cream, to the amount of two-thirds of its estimated market value, but the creamery buildings, premises and plant are to be insured by the Association on its own behalf, and the Department of Agriculture is not to accept or have any responsibility or liability in that connection. In any case in which the Association is indebted to the Government the premium receipt or any renewal receipts for such insurance shall be sent to the Dairy Commissioner.

12. For the season 1910 the loan fund charge shall be cents per pound of butter manufactured, such charge to be applied as follows:

(1) On the repayment of any loans heretofore or hereafter obtained by the Association from the Government.

(2) In payment of plant and equipment supplied, or which heretofore may have been supplied, and installed by the Government the property in which said plant and equipment is to remain in the Government till it is paid for.

13. The rental and interest charge shall be sufficient to cover—

(1) The payment of an annual rental for the plant and equipment furnished, or heretofore furnished, by the Government reckoned at the rate of three per cent. of such portion of the cost of the plant and equipment as is unpaid, such rental to be computed on the first day of January following the year in which such plant and equipment,

or any portion thereof is installed, and on each first day of January subsequent thereto (or subsequent to the year in which such plant and equipment has been installed if it has been installed prior to the date hereof), but no deduction shall be made from such rental by reason of the receipt of the whole or any part of the purchase price of such plant and equipment before the end of the year in which the rental is so computed.

- (2) The payment of the interest upon loans made by the Government upon mortgage security or otherwise.

14. Provision is to be made for the issuing of paid up shares in the Association to the persons supplying cream to the creamery in proportion to the amounts paid in by them severally to the loan fund, as set forth in Section 12 of this agreement.

15. The Dairy Commissioner agrees to keep the creamery building and plant in a good state of repair, ordinary wear and tear, damage by fire, lightning, tempest and other casualty excepted.

Dated at. this. day of

. A.D. 1910.

Witness:

President of the Association.

Witness:

Secretary of the Association.

Witness:

Dairy Commissioner.

(Agreement No. 3.)

MEMORANDUM OF AGREEMENT.

BETWEEN:

THE DAIRY COMMISSIONER ACTING FOR THE DEPARTMENT OF AGRICULTURE FOR
THE PROVINCE OF ALBERTA

and

THE. ASSOCIATION.

1. The Dairy Commissioner agrees, for the period of one year from May 1st, 1910, to market the butter shipped to him by the Association for that purpose to the best of his judgment and ability and to pay the Association the net proceeds realized from the sales of such butter after deducting:

- (1) The cost of railway freight paid on the butter at Calgary.
- (2) The cost of packages and other supplies furnished by him to the said Association for use in the creamery.
- (3) The pro rata cost of handling the butter in cold storage at Calgary until it is finally disposed of.
- (4) The charge of one cent per pound of butter manufactured to be applied as follows:
 - (a) On the repayment of any loan heretofore or hereafter obtained by the Association from the Government.
 - (b) In payment of plant and equipment supplied or which heretofore may have been supplied and installed by the Government the property in which said plant and equipment is to remain in the Government till it is paid for.
- (5) A further charge to be applied—
 - (a) Towards the payment of an annual rental for the plant and equipment furnished, or heretofore furnished, by the Government reckoned at the rate of three per cent. of such portion of the cost of the plant and equipment as is unpaid, such rental to be computed on the first day of January following the year in which such plant and equipment or any portion thereof, is installed, and on each first day of January subsequent thereto (or subsequent to the year in which such plant and equipment has been installed if it has been installed prior to the date hereof); but no deduction shall be made from such rental by reason of the receipt of the whole or any part of the purchase price of such plant and equipment before the end of the year in which the rental is so computed.
 - (b) Towards the payment of the interest upon loans made by the Government upon mortgage security or otherwise.

2. The Dairy Commissioner agrees to pay the Association on each shipment of butter received by him from the Association, such advances as he may estimate to be about eighty per cent. of its selling value, and to pay the balance due on such sales after the season's butter has been disposed of.

3. The Dairy Commissioner agrees to insure the butter against loss by fire only while contained in the cold storage building at Calgary, as trustee for, and on behalf of, the Association to the amount of two-thirds of its estimated market value, but the creamery buildings, premises and plant are to be insured by the Association on its own behalf, and the Department of Agriculture is not to accept or have any responsibility or liability in that connection. In any case in which the Association is indebted to the Government the premium receipt or any renewal receipts for such insurance shall be sent to the Dairy Commissioner.

4. Provision is to be made by the Association for the issuing of paid up shares in the Association to the persons supplying cream to the creamery, in proportion to the amounts paid in by them severally to the loan fund as set forth in subsection 4 of Section 1 of this agreement.

5. In consideration of the foregoing the Association agrees to employ a properly qualified buttermaker, approved by the Dairy Commissioner, to accept and carry into effect such directions as the Dairy Commissioner may give from time to time respecting the delivery of cream to the creamery, the details of manufacturing and the packing and the shipping of the butter to be sold by him.

Dated at this day of 1910.

Witness:
President of the Association.
 Witness:
Secretary of the Association.
 Witness:
Dairy Commissioner.

(Agreement No. 4.)

MEMORANDUM OF AGREEMENT.

BETWEEN:

THE DAIRY COMMISSIONER, ACTING FOR THE DEPARTMENT OF AGRICULTURE FOR THE PROVINCE OF ALBERTA.

and

THE BUTTER AND CHEESE MANUFACTURING ASSOCIATION.

1. The Dairy Commissioner agrees, for the period of one year from May 1, 1910, to market the butter shipped to him by the Association for that purpose to the best of his judgment and ability and to pay the Association the net proceeds realized from the sales of such butter after deducting—

- (1) The cost of railway freight paid on the butter at Calgary.
- (2) The cost of packages and other supplies furnished by him to the said Association for use in the creamery.
- (3) The pro rata cost of handling the butter in cold storage at Calgary until it is finally disposed of.

2. The Dairy Commissioner agrees to pay the Association on each shipment of butter received by him from the Association such advances as he may estimate to be about eighty per cent. of its selling value, and to pay the balance due on such sales after the season's butter has been disposed of.

3. The Dairy Commissioner agrees to insure the butter against loss by fire only while contained in the cold storage building at Calgary as trustee for, and on behalf of, the Association to the amount of two-thirds of its estimated market value.

4. In consideration of the foregoing the Association agrees to employ a properly qualified buttermaker, approved by the Dairy Commissioner and to accept and carry into effect such directions as the Dairy Commissioner may give from time to time respecting the delivery of cream to the creamery the details of the manufacturing, the packing and the shipping of the butter to be sold by him.

Dated at this day of A.D. 1910.

Witness:
President of the Association.
 Witness:
Secretary of the Association.
 Witness:
Dairy Commissioner.

Agreements 1, 2 and 3 were prepared for the associations who were indebted to the government on account of loans received towards the equipment of their creameries, and upon mortgage securities, and No. 4 for the associations who are no longer indebted to the government.

The following table shows at a glance the distribution of the various services in the operation of the government creameries, season 1910, under agreements 1, 2, 3 and 4, viz..

SERVICES PROVIDED	Under Agreement No. 1 by the	Under Agreement No. 2 by the	Under Agreement No. 3 by the	Under Agreement No. 4 by the
1 Labour in creamery.....	Department	Department	Association	Association
2 Cream collection.....	"	Association	"	"
3 Local cartage.....	"	Department	"	"
4 Local supplies, repairs.....	"	"	"	"
5 Accounting and payment to patrons....	"	Association	"	"
6 General supplies.....	"	Department	Department	Department
7 Freight and cartage on butter at Calgary.....	"	"	"	"
8 Cold storage services.....	"	"	"	"
9 Butter sales.....	"	"	"	"
Adopted by the Associations at.....	Content Rosenroll Daysland Spring Lake	Ferry Bank Viking Conjuring C'k Rimbey	Lakeview	Innisfail Markerville Red Deer Wetaskiwin

VI.—QUALITY BASIS PAYMENT FOR BUTTER AND CREAM, 1910.

After the close of the Red Deer Convention arrangements were made to take up the discussion of the grading and quality payment question at the annual general meetings of the creamery associations and at a number of the Farmers' Institute meetings which were held in creamery districts during the winter and early spring.

At the annual general meetings of the creamery associations one of their officers who attended the convention introduced the question by presenting the resolutions passed at the convention. These meetings were attended also by the writer of these lines or by one of the provincial dairy instructors, who dealt at some length with the more technical points involved in the care and grading of cream. In every case the meetings approved of the principle of paying a premium on quality and confirmed the action of their delegates at the convention.

It is believed that the publicity given to the new movement through the public press, by the issue of special circulars to creamery patrons and fairly exhaustive discussions at meetings held in creamery districts, thoroughly paved the way for the change and when the summer season's business opened the grading and premium system was applied to all the butter handled for creamery associations by the department.

The successful introduction of the grading system already referred to and the very satisfactory results obtained is largely due to the enthusiastic co-operation of the patrons, the cream collectors and the local management of the participating creameries. While this new work added considerably to the already exacting duties of the cream collectors, secretaries and buttermakers in charge of the creameries they did their part cheerfully and conscientiously, and deserve every commendation.

We appreciate also the valuable assistance of the local and agricultural press in the publicity they have given to any move-

ment which has for its object the betterment of our dairy industry. The proposed grading work received encouraging comment on every hand. From among a number of press references I wish to quote:

From "The Farmers' Advocate," May 11th, 1910.

CREAM PRICES BASED ON QUALITY.

Grading cream and the quality basis as payment, was the motto adopted at the Alberta buttermakers' convention. All the cream received at the different government creameries throughout Alberta this year will be sampled and graded. He who sends cream possessing consistency and quality to marshal it into the ranks of first grade, will receive a premium of two cents for his cream over the man who is content to file below him. Good cream is the prime essential of good butter, and the best butter brings the best price. Therefore the fact should not be questioned whether or not such a move as that taken by the Alberta buttermakers is a wise one.

Quite true, it is a bold step; yet it is a most important one. From Eastern Ontario comes the intelligence that such a scheme is impracticable, mainly because it might discourage patrons and drive them to other creameries, and thus bring failure to the deserted ones. No doubt such arguments should have some audience, but the conclusion is wrongly brought. Farmers who aim to produce a high grade are going to patronize the factory where they receive the highest price.

The husbandmen of Western Canada are men with ideals, and it is not complimentary to them in this instance to say that they will not aim at the best product and the highest price. Alberta's products are finding a high-class market in British Columbia, and it is a most important step that the co-operative creameries of the province have taken with the endeavour to place a uniform as well as a high grade butter on the market. If the quality basis as payment for cream has no other effect than to corral the poor product it is worthy of support and commendation.

It gives me much pleasure and satisfaction to record at the close of the season's business of the government creameries that the application of the grading and premium system has resulted in a marked improvement of the quality of the butter output of the creameries.

A comparative statement is given in Table V. The grade standards which form the basis of comparison being identical in both years' work. The table includes only the 13 creameries operated under direct government supervision in 1910, of which we have complete records.

TABLE V.—PROVINCIAL GOVERNMENT CREAMERIES, ALBERTA.

GRADING OF BUTTER.

CREAMERY	Summer Season 1909		Summer Season 1910		Average price per lb. Summer Season 1910	
	Firsts %	Seconds %	Firsts %	Seconds %	A cts.	B cts.
1.....	33.6	66.4	98.26	1.74	25.91	26.22
2.....	84.9	15.1	96.97	3.03	25.91	26.20
3.....	42.8	57.2	95.05	4.95	25.91	26.16
4.....	90.2	9.8	93.37	6.63	25.91	26.12
5.....	55.6	44.4	92.46	7.54	25.91	26.11
6.....	90.1	9.9	91.79	8.21	25.91	26.07
7.....	57.9	42.1	87.95	12.05	25.91	26.02
8.....	77.7	22.3	84.43	15.57	25.91	25.95
9.....	30.3	69.7	84.10	15.90	25.91	25.94
10.....	55.3	44.7	83.93	16.07	25.91	25.93
11.....	48.1	51.9	74.89	25.11	25.91	25.74
12.....	38.6	61.4	30.04	69.96	25.91	24.86
13.....	11.3	88.7	21.31	78.69	25.91	24.69
Averages ..	68.4	31.6	83.49 26.24c.	16.51 24.24c.	25.91	25.91



MOOSE IN THE BUFFALO PARK, WAINWRIGHT

Table V shows that the average selling price of the butter made in all the creameries was 25.91 cents per pound for the season. Column A shows the price each creamery would have received under the "pooling" system of payment and column B indicates what each creamery received on the basis of grade and a premium of 2 cents per pound of first grade butter.

While the proceeds from the butter sales were distributed among the creameries on the basis of grade yet in four cases the associations did not redistribute their proceeds as recommended. These are numbered 7, 9, 11 and 12 in the table. They were fearful lest they should lose some of their patrons. Yet, even in their case—and with a single exception—there was a marked reduction in the percentage of "Seconds" and corresponding increase in the proportion of "firsts."

The nine creameries that adopted the quality basis payment throughout report good satisfaction and no loss of patrons. This was to be expected.

"To make an increasingly finer product from unchanging raw material is good business." As our dairymen come to realize the truth and wisdom contained in that statement as fully as do many other branches of industry they will be ready to heartily support and promote any agency which makes for quality and fair play.

VII.—CONVENTION OF BUTTERMAKERS AND CREAMERY SECRETARIES AT INNISFAIL.

As in former years a convention of creamery buttermakers was held immediately prior to the opening of the summer season's business at Innisfail. The following quotations from a letter mailed to the buttermakers of the province gives an outline of the purpose and work of the convention:

"The Annual Provincial Buttermakers' Convention and Short Course will be held in the Town of Innisfail beginning at 2 p.m. on Tuesday, April the 19th.

"Addresses and discussions will be given on the dairy industry in the Province in general; grading of cream at the creameries and quality basis payment of butter; sampling and testing of milk and cream, the relative duties of patrons, cream haulers and management of the creameries; general creamery practice and sanitation; pasteurisation of cream, etc.

"In addition to the addresses and discussions, practical classes will be conducted in the grading of cream, scoring of butter, testing of milk and cream and the calculations connected therewith; tests for moisture and salt content of butter; steam fitting and repair work, soldering tinware, etc. In short, the course is intended to cover practically the whole field of creamery management. Preparations are being made to give special attention to the practical work outlined and the local management of the Innisfail creamery is kindly placing the creamery equipment at the disposal of the convention.

"I would also direct your attention to the enclosed Prize List of the Butter Exhibit and invite your participation in the contest. It is expected that Mr. W. A. Wilson, Superintendent of Dairying for Saskatchewan will be present and place the awards in the several classes."

BUTTER EXHIBIT AT BUTTERMAKERS' CONVENTION, INNISFAIL, APRIL 19, 1910.

Premium List.

	1st	2nd	3rd	4th
Class I—One 14 lb. box of butter (solid pack).....	\$8	\$6	\$4	\$2
Class II—Ten 1 lb. prints.....	8	6	4	2
Class III—Highest average score of Classes I and II.....	Challenge Trophy.			

(Messrs. P. Burns & Co., J. Y. Griffin & Co., Plunkett & Savage and D. G. Campbell of Calgary are the donors of the cash prizes and Messrs. Ellis & Grogan, representing C. Richardson & Sons, St. Mary's, Ontario, are giving the Challenge Trophy which is to be won twice by the same person, at the Annual Buttermakers' Convention, to become his property.)

NOTE: 1. No one creamery, or buttermaker, may enter twice in the same classes.

2. The exhibits must bear no mark or brand whereby they can be identified by the judges. If you wish to make an exhibit but have no plain 14 pound box and unprinted parchment wrappers on hand we shall be pleased to ship you on application, free of charge, sufficient for making up your exhibit to comply with the foregoing conditions.

3. Exhibits must reach Mr. George W. Scott, Dairy Instructor, Innisfail, not later than Tuesday, April 19, at 1.30 p.m.

C. MARKER,
Dairy Commissioner."

The Government creameries having decided to adopt the system of cream grading recommended at the Red Deer convention it was thought advisable to invite the secretaries of the associations concerned to attend the Innisfail convention in order that they might become familiar with the changes in their book-keeping which the new working agreements of the adoption of the grading system called for. Particulars are given in the following quotation from a letter addressed to the secretaries and to the owners of individual creameries:

"A short practical course will be given in creamery book-keeping at the Innisfail Dairy Convention, commencing at 2 p.m. on Tuesday, April 19th. The course will probably last a day and a half or two days and will deal with Cream Haulers' Records, Buttermakers' Records, Patrons' Cream Ledger, Returns to Patrons, Stock Book and Share Accounts, Cash and Analytical Ledger and Balance Sheets.

"The desirability of a uniform system of creamery book-keeping was emphasized by the Secretaries attending the Convention at Red Deer in February last.

"Mr. F. W. Underwood, Accountant in the Dairy Commissioners' office, will deal in a practical way with the various records leading up to the returns to patrons. Mr. E. J. Fream, Secretary-Treasurer of the Innisfail Creamery Association, will deal more particularly with Association book-keeping, using the system adopted at the Red Deer Convention.

"A supply of blank record and book forms will be on hand for the use of the persons attending the course and an opportunity will be given them to become familiar in a practical way with every phase of creamery book-keeping."

The attendance on the opening day of the convention was eighteen buttermakers, who had charge of creameries in various parts of the province, and eight creamery association secretaries.

The first afternoon a joint meeting was held in the town council chambers where Mr. Wm. Gunston, Councillor, presented an address of welcome on behalf of the Town of Innisfail, who was pleased to place the council chambers at the disposal of the convention.

During the afternoon addresses were delivered by Mr. George Harcourt, Deputy Minister of Agriculture, on the subject of "Forage Crops and Succulent Feed for Dairy Cows"; by Mr. Isaac Bateman, a progressive local dairyman and breeder of Holstein cattle, on the subject of "Alfalfa." These were both practical addresses and brought forward a great deal of helpful discussion and information.

Mr. W. A. Wilson, Dairy Superintendent for the Province of Saskatchewan, addressed the convention on "The Relations of the Buttermaker to His Employer and Patron." That Mr. Wilson touched a responsive and sympathetic chord was very evident at the conclusion of his address.

The writer of these lines dealt with the question of "Cream Grading" as he had done at the Red Deer Convention and urged the buttermakers to encourage, as far as they could, the work of the quality patrons, to keep in view the ideal, "all was as good as the best," and to steadily work towards that ideal.

In the sessions following the buttermakers and secretaries worked separately. The former under the direction of Messrs. Pearson, Scott and Flan at the creamery building, where a specially large testing room had been built for class purposes. The latter took up their work of book-keeping in the town offices under the direction of Messrs. Underwood and Fream.

THE BUTTER EXHIBIT.

Although the great majority of the creameries had not yet commenced operations for the season eleven exhibits were brought in and entered in classes I and II. Mr. W. A. Wilson, Superintendent of Dairying for the Province of Saskatchewan, acted as judge of the exhibits and placed the awards as follows:

Class I.

- 1st prize, D. Morkeberg, Markerville.
- 2nd prize, L. M. McLean, Innisfail.
- 3rd prize, L. M. Campbell, Red Deer.
- 4th prize, W. Hamilton, Olds.

Class II.

- 1st prize, D. Morkeberg, Markerville.
- 2nd prize, M. L. Campbell, Red Deer.
- 3rd prize, L. M. McLean, Innisfail.
- 4th prize, W. Hamilton, Olds.
- Highest average score, D. Morkeberg, Markerville.

BUTTER SCORING CONTEST.

In this contest the participants were required to score several duplicate samples of different types of butter. The numbering and arrangement of the samples were known only to the committee in charge of the contest. Upon its completion all the scores recorded by each contestant were compared and the percentage of error, or difference, in the several scores of the same butter calculated. The awards were made on the basis of the average percentage of error in each man's score, not exceeding one-half point on flavour.

Mr. E. G. Henderson, General Manager of The Canadian Salt Co., Ltd., Windsor, Ontario, kindly donated the sum of \$50.00 towards this contest and following gives the names of the winners and the amount of prizes received according to the closeness of scoring.

J. J. Skalitzky, Viking.....	\$15.00
A. A. Munro, Rimbey.....	10.00
W. T. Nelson, Didsbury.....	7.50
Will Hansen, Markerville.....	7.50
H. W. Trimble, Red Deer.....	5.00
T. W. Cogland, Spring Lake.....	5.00

The generosity of the several firms contributing towards the premium list was greatly appreciated by the convention as well as by the writer.

Immediately before the closing session of the convention the citizens of Innisfail entertained the visitors at a splendid banquet. On this occasion the Deputy Minister of Agriculture presented, on behalf of the Department, the prizes awarded in the 1909 season's butter scoring contest as follows:

D. Morkeberg, Markerville.....	Challenge Trophy and Gold Medal
J. J. Skalitzky, Spring Lake....	Silver Medal
L. M. McLean, Innisfail.....	Silver Medal
H. A. Gracey, Blackfalds.....	Silver Medal
M. L. Campbell, Red Deer....	Silver Medal
W. Hamilton, Olds.....	Silver Medal
A. A. Munro, Rimbey.....	Silver Medal

Mr. Wilson presented the prizes won by the participants in the butter exhibit at the convention and Mr. A. M. Grogan presented the Richardson Challenge Trophy to the exhibitor who had the highest average score in classes I and II.

During the progress of the banquet speeches were made by a number of local business and dairymen; some reminiscent, others in prophetic mood. They all agreed, however, that the dairy industry had been a mighty factor in the development of their district and the prosperity of their citizens.

VIII.—SHORT COURSES IN HOME DAIRY WORK.

The writer and the dairy instructors delivered lectures and gave several practical demonstrations in home dairying in connection with the short courses in Agriculture conducted by the department at Lethbridge, Olds and Vegreville in the early part of the year. The following topics were included in the lecture courses: The nature and composition of milk, milking, care of milk, testing of milk and its products, cream separation, centrifugal cream separators, ripening of cream, churning and preparing butter for market, dairy record work on the farm, care of milk and cream for cheese factories and creameries, etc. The demonstrations took the form of testing milk and cream, cream separation and butter making, the aim being to present in a simple, practical manner the chief technical points to observe in home dairy work.

IX.—EXHIBITION WORK.

As in former years the department had a complete home dairy equipment in operation during the Provincial Exhibition in Calgary in July. The exhibition company having placed at our disposal for that purpose a large prominent space on the ground floor of the pavillion. Messrs. Pearson and Scott, instructors, conducted the daily demonstration in buttermaking and in the testing of milk products, work which attracted a good deal of attention from exhibition visitors.

It is gratifying to note that the principal fairs in the province are giving increased attention and offering liberal prizes to dairy competitions. This is calculated to encourage the dairy men and women of the surrounding country to bring in the best products and the most productive animals for open competition.

The writer officiated as judge of dairy products at the Winnipeg Industrial Exhibition and jointly with Mr. W. A. Wilson, Superintendent of Dairying for Saskatchewan, at the Provincial Exhibition at Calgary. The dairy instructors acted by special request in like capacity at a number of the fairs in the province.

X.—FACTORY INSTRUCTION.

The provincial dairy instructors paid periodical visits to the creameries in the province during the season. Their services were appreciated and their advice followed in most cases, yet there are some creameries and some butter makers who do not seem to appreciate the necessity of orderly sanitary conditions and in the absence of legislation upon that point the instructors could merely advise and make suggestions which might or might not, be acted upon. It is but fair to say, however, that there are but few cases in which sterner measures would be needed were they available.

As our Dairymen's Act received several important amendments at the recent session of the legislature the work of factory instruction and inspection may be carried forward with sufficient

authority to secure the results which are looked for, namely, the manufacture of first class dairy products upon sanitary premises and in buildings properly equipped and managed.

XI.—PUBLIC MEETINGS,

As in former years the writer and the dairy instructors, Messrs. Pearson and Scott, addressed a large number of institutes and specially called dairy meetings throughout that portion of the province where dairying is carried on to any extent. The topics discussed at these meetings were selected to suit local requirements in so far as these could be ascertained or anticipated. For instance, the subject of grading and quality basis payment for cream and butter was discussed at the meetings which were held in creamery districts. The fullest possible discussion, pro and con, was encouraged. The results of the preliminary work of the department in the grading of cream and butter at government creameries was graphically depicted on large charts and did a great deal towards drawing out questions, possible objections to some details or other, suggestions and opinions. The simplicity of the proposed grading system and its evident fairness appealed and received the endorsement of the people who would be most affected by its introduction, namely, the patrons of the creameries. At points where the people were more interested in home dairying suitable topics were discussed. In our endeavour to deal with the science and art of dairying we should not overlook the commercial end of it. Dairying should be regarded as a business proposition, a profitable branch of farming. The dairyman who applies knowledge and skill in his business is likely to make a success of it financially.

XII.—CORRESPONDENCE.

During the year ending December 31st, 3,276 letters have been received at the dairy commissioner's office and 3,774 sent out. The correspondence deals largely with the administration of the government creamery work and the butter sales, but a large number of inquiries were received and answered on matters connected with dairying in the province in general, the establishment of creameries, etc.

C. MARKER,
Dairy Commissioner.

3.—REPORT OF THE CHIEF INSPECTOR OF WEEDS.

SIR,—I have the honour to submit herewith my first annual report as Chief Inspector of Weeds. When I received my appointment, there were eighteen weed districts and twenty-one inspectors. At the beginning of the inspection season the number of districts was increased to thirty and the number of inspectors to thirty-one, but on account of getting started so late in the season, it was found necessary to increase the number of inspectors to thirty-five in order to get over all the badly infested places before the weeds matured. To do the most effective work, the inspectors for Southern Alberta should be appointed the first part of April and those in Central Alberta about the middle of May.

Owing to the dry weather in June and July, the grain in many parts of Southern Alberta did not make a vigorous growth, thus giving the Russian thistle, which is well adapted to dry soil, a better chance to grow, and consequently there was more Russian thistle last season than previously. The inspectors in these districts have worked faithfully destroying this weed. On the other hand, the seed of the tumbling mustard lay dormant in the soil in the dryer portions of Southern Alberta during June and July and did not germinate until the rainfall during the latter part of the summer. Fearing that these plants would mature before the frost killed them, it was found necessary for a great many of the inspectors to re-inspect districts that they had previously passed through and pronounced clean.

The regular inspection work began on July the 25th. In Southern Alberta there were many districts in which the inspection work was not completed owing to stinkweed which germinated during October and made considerable growth. This plant is a winter annual which, if not destroyed in the fall, will produce seeds very early in the spring. In some parts of Central Alberta the threshing machines were in operation quite late in the fall and required the attention of the inspectors.

During the season about twenty-one thousand farms were examined. Almost every place was visited twice and in many cases the inspectors called a third time. In the majority of cases the farmers complied with the instructions given by the inspectors. About six hundred and fifty threshing machines were inspected.

It was found necessary for the department to destroy weeds on a number of places, such as abandoned homesteads, government fire-guards and unoccupied lands owned by speculators. The owners have been communicated with, and some have agreed to refund the money expended. As all the accounts for work of this nature have not reached the department, it is impossible to state the amount expended in this way.

In some instances it has been found necessary to conduct prosecutions and they have had an excellent effect in persuading negligent farmers to clean up their weeds. The fines ranged from one dollar to twenty dollars. In every case where a fine was imposed the owner of the property had been served with a notice and visited a number of times by the inspector. The inspectors have tried to make the campaign educational as far as possible, and it was only when the instructions of the inspector were totally disregarded that the provisions of the Act were enforced.

The cleaning of the grain by the threshing machines is a very important matter and should be given special attention. In Central Alberta ball mustard constitutes a much more serious problem than in the south. This year it was particularly prevalent owing to the fact that the dry weather in the spring prevented it from germinating until the grain was too high to allow cultivation with harrows. With the exception of wild oats the seeds of this plant are considerably larger than those of any other noxious weed; and the inspectors found that none of the threshing machines were equipped with sieves large enough to clean them out.

The machine agencies had no suitable sieves on hand, but when requested ordered larger sieves. A number of machines have been equipped with these sieves and now do better work. Where the grain is very badly infested with ball mustard it is almost impossible for the machines to clean it out with one sieve. If two sieves were used, a quite coarse one on top and a finer one underneath, more satisfactory work could be done. The upper one would let all the weed seeds through along with the fine kernels of grain, thus giving the under sieve less work to do. The layer of grain passing over it would be much thinner and so give the weed seeds a chance to pass through the sieve. A sieve was made with two different sizes of screening, the main body composed of zinc screening, six holes to the inch, and one foot on the lower end made of screening about two sizes coarser. This sieve was put into a machine and did satisfactory work in threshing oats quite badly infested with ball mustard. However, I am not prepared to state at present that it will do satisfactory work under all conditions. The owner of the machine has promised to report from time to time the nature of the work done.

The threshing machine companies should be advised of the conditions in Alberta and of the requirements as to seed cleaning in the province. There should be no difficulty in adapting their machines to clean ball mustard from the grain.

The reports received from inspectors who have completed their work state that there is a great improvement in their districts. One thing to be regretted is that some of the farmers are careless about their seed grain and do not appear to realize the importance of cleaning the weed seed out of their grain before sowing. Too much care cannot be taken to see that clean grain is sown. Every farmer should have a fanning-mill and thoroughly fan his seed grain.

Great care should be taken in the matter of feeding stock with grain containing weed seed. These seeds pass uninjured through the digestive organs of the animals and are ordinarily scattered by the stock. It would therefore be advisable that persons feeding infested grain to their cattle should prevent them from running at large and thus disseminating the noxious seed.

A number of complaints have reached the department regarding the spread of weed seeds in towns and cities. On account of the amount of territory allowed to each inspector, it is almost impossible for them to get the time to locate the owners of different lots in the towns and cities. In The Municipal Ordinance provision is made for the passing of a by-law compelling the destruction of noxious weeds. If every town council would pass such a by-law it would greatly facilitate matters for the department. Moreover, it would be much easier and necessitate less expense for each town to enforce such a by-law within the limits of the corporation. Some of the worst weeds in the province are at present entirely confined to towns, and if they were destroyed before they were carried into the surrounding country, much future labour and expense would be avoided.

The destruction of noxious weeds on vacant lots would also add greatly to the appearance of the towns. In view of these facts I would suggest that The Municipal Ordinance be amended making it incumbent on municipalities to compel the destruction of noxious weeds within their limits. I would also suggest that the city charters be amended in the same way. The department would gladly supply information and advice to inspectors appointed under local by-laws, passed pursuant to such provincial regulations.

Great care should be taken by the farmers to destroy any new weeds before they gain a foothold. The perennial sow thistle, one of the worst of weeds and one of the most difficult to eradicate is at present found in only a very few places in Alberta. Wherever this weed is found it should be destroyed at once, and great care should be taken to prevent it spreading. Time spent in this way will save a great deal of future labour and expense.

Several complaints have reached the department regarding the sale of chopped feed containing noxious weed seeds. The writer visited a number of feed firms and warned them not to sell any more chopped feed containing noxious weed seeds as it is contrary to the Act. The feed firms visited promised to comply with the Act in the future and no complaints have reached the department for some time.

A large number of complaints have been sent to the department re the sale of feed oats containing wild oats, but as unground feed grain is not covered by The Noxious Weeds Act, it is impossible for the department to prevent the sale of feed grain infested with noxious seeds. A large percentage of these noxious seeds pass through the digestive organs of animals uninjured, and clean land is often infested by feeding working horses on feed grain containing noxious seeds. It is therefore suggested that an amendment be made to the Act limiting the number of noxious weed seeds to be sold in feed grain of any kind.

In localities where there are no fences and cattle are allowed to run at large, a great many weeds are distributed by the cattle feeding on the screenings from threshing machines. The Act at present allows ten days to elapse before these weed seeds must be destroyed. I do not think it would be an injustice to the farmer to have this clause of the Act changed from "ten days" to "immediately." Often a heavy wind will come up and if the weed seeds have not been burned or destroyed they will be blown over the field. This is a very important matter and should receive the attention of the farmer as soon as the threshing machine is moved.

Spraying experiments at a number of agricultural colleges both in Canada and in the United States have demonstrated that wild mustard can be killed by spraying infested grain fields with a solution of iron sulphate in the proportion of one hundred pounds of iron sulphate to fifty gallons of water. Plants with hairy leaves are most susceptible to the herbicidal action of the spray. I believe that spraying would be an excellent method of eradicating ball mustard which is so prevalent in the central part of the province. I would advise the department to purchase a spraying machine in order that spraying experiments may be conducted in Alberta.

A large number of the elevators have been visited and seem to be complying pretty closely with the provisions of the Act.

Respectfully submitted,

C. E. LEWIS,
Chief Inspector of Weeds.

4.—REPORT OF CHIEF GAME AND FIRE GUARDIAN.

SIR,—I have the honour to submit herewith my fifth annual report in connection with the enforcement of The Game Act and The Prairie Fires Ordinance for the year 1910.

I.—PROTECTION OF GAME.

Big Game.—Moose, elk, deer and caribou appeared to be as plentiful as in former years.

Mountain Sheep and Goat are apparently increasing in numbers, due no doubt to the protection given them in the Rocky Mountain Park, and a more stringent enforcement of the provisions of The Game Act in the Pincher Creek district tributary to the mountains, in which district a salaried game guardian devotes his entire time to enforcing the provisions of the Act.

Antelope, however, are undoubtedly decreasing, not owing entirely to shooting, but principally to the fact that their range is being gradually reduced by settlement. It is conceded that unless a section of country is held as a range for these beautiful animals they must, like the buffalo, become extinct, or almost so, or be found in parks and game preserves only.

Ducks were not so plentiful as during previous seasons. This may be owing to the fact that the past summer was one of the driest which has been known for some years, the result being that the water in many of the smaller sloughs and lakes dried up, thus driving the birds to larger lakes. In fact in the months of September and October during the early morning and late evening, the birds in some localities frequented the stubble and grain fields in thousands in order, it is claimed, to obtain food.

Prairie Chicken (Sharptailed Grouse).—It is a number of years since these birds have been so plentiful as they were in many sections during the past season. It is to be regretted, however, that there was more illegal shooting than has occurred for many years, owing, no doubt, to the fact that the birds were more plentiful than usual and also owing to a newspaper outside the province giving an incorrect digest of the game laws of the province. The error was in connection with prairie chicken, and stated that the season therefor opened on the fifteenth day of September. Immediately on this being brought to my attention notices were forwarded to the press of the province advising that the season did not open until the first day of October. If this had not been attended to there is no telling how many persons would have commenced shooting prairie chicken contrary to the Act.

Partridge were reported as being unusually plentiful, the result being that a very large number were taken by farmers and sportsmen.

Hungarian Partridge are reported as doing nicely and spreading over new territory. The sportsmen who interested themselves in introducing these birds are doing everything possible to prevent shooting on the land where the birds were placed.

The amendments passed at the last session of the Legislature should result in the better protection of game, as the hands of the game guardian have been materially strengthened by giving him the power to arrest any person found committing any offence against

the provisions of the Act. The section requiring residents of cities, towns and villages to obtain licenses before hunting game birds will no doubt add materially to the duties of game guardians, but with the anticipated increase in revenue it will be possible to place more guardians on salary.

BIG GAME SECURED.

That portion of the open season of 1910, extending from November 1st to December 15th, was like that of 1909, very favourable for the big game hunter who wished to obtain moose, deer or caribou, there being sufficient snow for tracking throughout the period referred to.

The number of big game animals secured by sportsmen, as shown by affidavits forwarded as required by the provisions of subsection 2 of section 19 of the Act, is in excess of any previous year. The returns received as required under this section show that the following big game has been killed by residents of the province during the past four years:

	1907	1908	1909	1910
Deer.....	59	125	299	540
Antelope.....	49	45	89	126
Moose.....	14	37	86	184
Caribou.....	..	..	5	8
Mountain Sheep.....	..	..	40	54
Mountain goat.....	..	..	38	46
Elk.....	..	..	..	7

This of course does not show the total game killed, as in the northern half of the province residents did not require a license to hunt. I am pleased, however, that the amendments of the last session now provide that every person must have a license before hunting or shooting any big game.

REVENUE FROM GAME.

Branding of Game Heads.

	1907	1908	1909	1910
Mountain Sheep.....	216	2	9	11
Mountain Goat.....	62	..	1	1
Elk.....	41	3	4	2
Moose.....	39	29	33	32
Caribou.....	16	6	6	2
Deer.....	142	15	26	26
Antelope.....	95	5	..	3

The figures for 1907 include a very large proportion of the heads in the province at that time as it was at that period The Game Act was amended to provide for the branding of all heads before they could be sold.

Licenses and Permits.

	1907	1908	1909	1910
Resident's Big Game Licenses.....	446	529	1,162	1,997
General Game Licenses.....	4	7	17	24
Bird Game Licenses.....	..	..	3	3
Trappers' Licenses.....	6	4	1	10
Guides' Licenses.....	6	3	7	8
Camp Helpers' Licenses.....	1	1	1	4
Game Dealers' Licenses.....	12	23	39	30
Permits to export.....	15	17	19	35
Permits to collect.....	6	6	16	23

Convictions and Fines.

	1908	1909	1910
For hunting on Sunday.....	12	4	4
For hunting in close season.....	11	36	29
Buying and selling unbranded heads.....	8	6	3
Hunting without a license.....	7	6	14
Selling without a license.....	7	7	..
Miscellaneous offences.....	4	2	9
Total of fines imposed.....	1908 \$337.50	1909 \$447.50	1910 \$328.00
Average penalty.....	6.89	7.34	5.56

MONEYS COLLECTED.

	1907	1908	1909	1910
Branding.....	\$2,158.00	\$240.00	\$314.00	\$295.00
Permits to collect.....	65.00	50.00	55.00	45.00
Permits to export.....	171.00	92.00	50.00	76.00
Game Dealers' Licenses.....	120.00	230.00	390.00	300.00
Camp Helpers' Licenses.....	2.50	2.50	2.50	10.00
Guides Licenses.....	30.00	15.00	35.00	40.00
Trappers' Licenses.....	40.00	40.00	10.00	100.00
Bird Game Licenses.....	.....	.....	45.00	45.00
General Game Licenses.....	93.00	175.00	425.00	600.00
Residents' Big Game.....	1,115.00	1,322.50	2,905.00	4,992.50
Fines.....	154.00	337.50	447.50	328.00
Confiscated Game.....	.....	.....	104.50	108.75
	\$3,948.50	\$2,504.50	\$4,783.50	\$6,940.25
Total Revenue for 1910.....				\$6,940.25
Expenditure.....				4,665.20
Excess of revenue over expenditure.....				\$2,275.05

GAME GUARDIANS.

The decision to furnish game guardians with a complimentary copy of "Rod and Gun" has been very much appreciated by them. This magazine is considered to be the best of its kind in Canada and furnishes reliable information in connection with the protection of game as well as other matters of interest to sportsmen and game protectionists. I would therefore recommend that all game guardians be again furnished with this publication for the year 1911.

TABLE I.—A RETURN SHOWING THE NUMBER AND VALUE OF THE FUR CATCH.

	FROM SMALL DEALERS			FROM WHOLESALE DEALERS & EXPORTERS	
	NO. OF SKINS	AVERAGE VALUE	TOTAL VALUE	NO. OF SKINS	TOTAL VALUE
Badger.....	142	\$ 1 32	\$187. 50	360	.....
Bear, Black.....	68	11. 31	769. 25	1,671	.....
Bear, Brown.....	8	9. 93	79. 50	143	.....
Bear, Grizzly.....	8	27 50	220. 00	15	.....
Bear, Cub.....	22	5. 93	130. 50	140	.....
Beaver.....	.....	.....	.....	5,607	.....
Coyote.....	3,222	3. 77	12,056. 45	4,128	.....
Fisher.....	10	12. 30	123. 00	194	.....
Fox, Cross.....	19	11. 31	215. 00	445	.....
Fox, Red.....	86	6. 65	572. 00	865	.....
Fox, Silver.....	2	262. 50	525. 00	111	.....
Lynx.....	222	20. 67	4,568. 90	802	.....
Marten.....	135	9. 93	1,341. 50	5,836	.....
Otter.....	.....	.....	.....	500	.....
Mink.....	412	6. 23	2,567. 25	3,024	.....
Muskrat.....	234,337	. 46	108,969. 76	671,986	.....
Skunk.....	289	1. 09	317. 30	432	.....
Weasel.....	8,350	. 53	5,009. 65	20,838	.....
Wolverine.....	8	8. 31	66. 50	266	.....
Wolf.....	38	4. 34	165. 00	198	.....
Deer.....	2	2. 00	4. 00	.....	.....
Moose.....	3	1. 50	4 50	.....	.....
Caribou.....	.....	.....	.....	11	.....
Muskox.....	.....	.....	.....	32	.....
			\$137,892. 56		\$503,885. 49

TABLE II.—SHOWING ANNUAL FUR CATCH.

	FROM SMALL DEALERS				FROM WHOLESALE DEALERS AND EXPORTERS			
	1907	1908	1909	1910	1907	1908	1909	1910
Badger.....	595	360	329	142	310	252	182	360
Bear, Black....	285	117	103	68	1,660	2,173	5,671	1,671
Bear, Brown....	83	24	26	8	342	300	195	143
Bear, Grizzly..	28	10	7	8	127	40	37	15
Bear, Cub.....	44	9	19	22	100	70	51	140
Beaver.....	750	.....	85	.....	2,542	1,514	8,495	5,607
Coyote.....	11,502	11,537	5,765	3,222	5,262	6,404	3,055	4,128
Fisher.....	44	34	16	10	351	242	155	194
Fox, Cross.....	352	86	19	19	1,674	910	445	445
Fox, Red.....	1,111	254	89	86	4,662	1,638	714	865
Fox, Silver....	216	12	2	2	411	242	107	111
Lynx.....	12,511	1,834	307	222	42,669	7,778	1,176	802
Marten.....	11,273	377	157	135	12,224	9,397	7,378	5,836
Otter.....	472	12	5	.....	423	520	539	500
Mink.....	8,053	637	369	412	7,912	2,685	2,562	3,024
Muskrat.....	159,661	104,811	142,334	234,337	119,833	157,493	288,654	671,986
Squirrel.....	1	390	51	.....	.....	.....	.....	.....
Skunk.....	4,189	268	216	289	3,914	786	518	432
Weasel.....	3,256	4,984	5,889	8,350	5,491	7,523	14,643	20,838
Wolverine.....	451	7	4	8	446	642	495	266
Wolf.....	65	23	34	38	922	237	218	198
Deer.....	357	16	1	2	30	.....	.....	.....
Moose.....	17	1	1	3	.....	24	8	.....
Elk.....	4	.....	.....	.....	.....	17	.....	.....
Caribou.....	.....	.....	.....	.....	.....	.....	125	11
Muskox.....	.....	.....	.....	.....	.....	1	127	32

To those who are interested in the protection of game the close seasons adopted in other places will no doubt be of interest. The following tables will give the desired information for the year 1910:

TABLE III.—OPEN SEASON FOR GAME BIRDS IN VARIOUS STATES AND PROVINCES.

STATES	Sharptailed Grouse (Prairie Chicken) Ruffed Grouse (Partridge)	DUCK	GOOSE AND SWAN
Maine	Sept. 15 to Dec. 1...	Sept. 1 to Jan. 1...	
New Hampshire	Oct. 1 to Dec. 1...	Oct. 1 to Feb. 1...	
Vermont	Sept. 15 to Nov. 15...	Sept. 1 to Jan. 1...	Sept. 1 to Jan. 1
Massachusetts	Oct. 15 to Nov. 15...	Sept. 15 to Jan. 1...	Sept. 15 to Jan. 1
Rhode Island	Oct. 15 to Dec. 16...	Aug. 15 to Apr. 1...	
Connecticut	Oct. 1 to Dec. 1...	Sept. 1 to Jan. 1...	Sept. 1 to Jan. 1
New York	Oct. 1 to Dec. 1...	Sept. 16 to Jan. 1...	Sept. 16 to Jan. 11
Pennsylvania	Oct. 15 to Dec. 1...	Sept. 1 to Apr. 10...	Sept. 1 to Apr. 10
Delaware	Nov. 15 to Jan. 1...	Oct. 1 to Apr. 16...	Oct. 1 to Apr. 16
Maryland	Nov. 1 to Dec. 25...	Nov. 1 to Apr. 11...	Nov. 1 to Apr. 11
Virginia	Nov. 1 to Feb. 1...	Oct. 15 to May 1...	Oct. 15 to May 1
West Virginia	Oct. 15 to Dec. 1...	Sept. 1 to Apr. 20...	Sept. 1 to Apr. 20
Kentucky	Nov. 15 to Jan. 1...	Aug. 15 to Apr. 1...	Aug. 15 to Apr. 1
Ohio	Nov. 15 to Dec. 5...	Sept. 1 to Jan. 1...	Sept. 1 to Jan. 1
Michigan	Oct. 15 to Dec. 1...	Sept. 1 to Jan. 2...	Sept. 1 to Jan. 2
Indiana	Nov. 10 to Jan. 1...	Sept. 1 to Apr. 15...	Sept. 1 to Apr. 15
Illinois	July 1, 1911...	Sept. 2 to Apr. 15...	Sept. 2 to Apr. 15
Wisconsin	Sept. 10 to Dec. 1...	Sept. 1 to Jan. 1...	Sept. 10 to May 1
Minnesota	Oct. 1 to Dec. 1...	Sept. 7 to Dec. 1...	Sept. 7 to Dec. 1
Iowa	Nov. 1 to Dec. 15...	Sept. 1 to Apr. 15...	Sept. 1 to Apr. 15
Missouri		Sept. 15 to May 1...	Sept. 15 to May 1
Kansas	Sept. 15 to Oct. 15...	Sept. 1 to Apr. 15...	Sept. 1 to Apr. 15
Nebraska	Oct. 1 to Dec. 1...	Sept. 15 to Apr. 6...	Sept. 15 to Apr. 6
South Dakota	Sept. 10, 1911...	Sept. 10 to Apr. 10...	Sept. 10 to Apr. 10
North Dakota	Sept. 7 to Nov. 2...	Sept. 7 to Dec. 16...	Sept. 7 to Dec. 16
Montana	Oct. 1 to Nov. 1...	Sept. 1 to Jan. 1...	Sept. 1 to Jan. 1
Wyoming	Sept. 25 to Dec. 1...	Sept. 1 to Jan. 1...	Sept. 1 to Jan. 1
Colorado	Sept. 10 to Oct. 11...	Sept. 10 to Apr. 16...	Sept. 10 to Apr. 16.
Florida		Oct. 1 to Apr. 1...	
Alabama	Dec 1, 1912...	Sept. 1 to Mar. 15...	Sept. 1 to Mar. 15
Mississippi		Sept. 1 to Mar. 1...	Sept. 1 to Mar. 1
Tennessee	Nov. 1 to Mar. 1...	Oct. 1 to Apr. 15...	Oct. 1 to Apr. 15
Louisiana		Oct. 1 to Mar. 15...	Oct. 1 to Mar. 1
Oklahoma		Aug. 15 to May 1...	Aug. 15 to May 1
New Mexico	Oct. 1 to Jan. 1...		
Arizona	Oct. 15 to Feb. 1...		
California	Sept. 1, 1911...	Oct. 1 to Feb. 15...	
Nevada	Oct. 1 to Jan. 1...	Sept. 15 to Mar. 15...	Sept. 15 to Mar. 15
Utah	Mar. 11, 1913...	Oct. 1 to Jan. 1...	Oct. 1 to Jan. 1
Idaho	Aug. 15 to Dec. 1...	Sept. 1 to Mar. 1...	Sept. 1 to Mar. 1
Washington	Sept. 1 to Jan. 1...	Oct. 1 to Feb. 1...	Oct. 1 to Feb. 1
Oregon	Oct. 15 to Nov. 15...	Oct. 15 to Feb. 15...	Oct. 1 to Mar. 1
Alaska	Sept. 1 to Mar. 2...	Sept. 1 to Mar. 2...	Sept. 1 to Mar. 2
PROVINCES			
British Columbia	Sept. 15 to Apr. 1...		
Yukon	Sept. 1 to Mar. 15...	Aug. 10 to June 1...	Aug. 10 to June 1
Alberta	Oct. 1 to Nov. 1...	Aug. 23 to Jan. 1...	
Saskatchewan	Oct. 1 to Nov. 1...	Sept. 1 to Jan. 1...	Sept. 1 to Jan. 1
Manitoba	Oct. 1 to Oct. 20...	Sept. 1 to Dec. 1...	
Ontario	Oct. 15 to Nov. 16...	Sept. 15 to Dec. 16...	Sept. 15 to Apr. 16
Quebec	Sept. 1 to Dec. 16...	Sept. 1 to Mar. 1...	
New Brunswick	Sept. 15 to Dec. 1...	Sept 1 to Dec. 2...	Sept. 1 to Dec. 2
Nova Scotia	Oct. 1 to Nov. 1...	Aug. 15 to Mar. 1...	
Prince Edward Isl'd	Oct. 1 to Dec. 1...	Aug. 20 to Jan. 1...	Sept. 15 to May 10
Newfoundland	Oct. 1 to Dec. 15...	Oct. 1 to Dec. 15...	

TABLE IV.—OPEN SEASON FOR BIG GAME IN VARIOUS STATES AND PROVINCES.

STATES	DEER	ELK	MOOSE	ANTELOPE	SHEEP AND GOAT
Maine.....	Oct. 1 to Dec. 15.		Oct. 15 to Dec. 1.		
New Hampshire.....	Oct. 1 to Dec. 1.				
Vermont.....	Oct. 25 to 31.....				
Massachusetts.....	To June 1, 1911.				
Connecticut.....	Sept. 16 to Nov. 1				
New York.....					
New Jersey.....	Nov. 15 to Dec. 1.				
Pennsylvania.....	Sept. 1 to Dec. 1.				
Virginia.....	Oct. 15 to Dec. 1.				
West Virginia.....	Sept. 1 to Mar. 1.				
Kentucky.....	Nov. 10 to Dec. 1.		To June 16, 1913.		
Michigan.....	To June 15, 1919.				
Illinois.....	Nov. 11 to Dec. 1.		Nov. 10 to 30.		
Wisconsin.....	Nov. 10 to 30.				
Minnesota.....					
Iowa.....	Nov. 1 to Jan. 1.				
Missouri.....	Nov. 1 to Dec. 1.	Nov. 1 to Dec. 1.			Nov. 1 to Dec. 1
South Dakota.....	Nov. 10 to Dec. 1.				
North Dakota.....	Oct. 1 to Dec. 1.	Oct. 1 to Dec. 1.			Oct. 1 to Dec. 1
Montana.....	Sept. 25 to Dec. 1.	Sept. 25 to Dec. 1.	To Sept. 25, 1912.		
Wyoming.....	Oct. 1 to Oct. 11				
Colorado.....	Nov. 1 to Feb. 1				
South Carolina.....	July 15 to Jan. 1.				
Georgia.....	Nov. 1 to Feb. 1.				
Florida.....	Nov. 1 to Jan. 1.				
Alabama.....	Nov. 15 to Mar. 1.				
Mississippi.....	To Oct. 1, 1911.				
Tennessee.....	Sept. 1 to Feb. 1.				
Arkansas.....	Nov. 1 to Jan. 1.				
Texas.....					

Oklahoma.....	Nov. 1 to Dec. 1.....	.....	.....	.....	.....
New Mexico.....	Oct. 15 to Nov. 16.....	.....	.....	.....	.....
Arizona.....	Sept. 15 to Dec. 1.....	.....	.....	.....	.....
California.....	July 15 to Nov. 1.....	.....	.....	.....	.....
Nevada.....	Sept. 15 to Nov. 15.....	.....	.....	.....	.....
Utah.....	Oct. 15 to Nov. 15.....	.....	.....	.....	.....
Idaho.....	Sept. 1 to Dec. 1.....	.....	.....	.....	Sept. 1 to Dec. 1
Washington.....	Oct. 1 to Dec. 1.....	.....	.....	.....	Oct. 1 to Dec. 1
Oregon.....	Aug. 1 to Nov. 1.....	.....	.....	.....	.....
Alaska.....	Aug. 15 to Nov. 2.....	.....	.....	.....	Aug. 20 to Jan. 1
PROVINCES					
British Columbia.....	Sept. 1 to Dec. 16.....	.....	.....	.....	.....
Yukon.....	Sept. 1 to Mar. 1.....	Sept. 1 to Jan. 1.....	.....	.....	Sept. 1 to Nov. 15
Alberta.....	Nov. 1 to Dec. 15.....	Sept. 1 to Mar. 1.....	.....	.....	Sept. 1 to Mar. 1
Saskatchewan.....	Dec. 1 to Dec. 15.....	Nov. 15, 1912.....	.....	.....	Sept. 1 to Oct. 15
Manitoba.....	Dec. 1 to Dec. 15.....	Dec. 1 to Dec. 15.....	.....	.....	.....
Ontario.....	Nov. 1 to Nov. 16.....	Dec. 1 to Dec. 15.....	.....	.....	.....
Quebec.....	Sept. 1 to Jan. 1.....	Oct. 16 to Nov. 16.....	.....	.....	.....
New Brunswick.....	Sept. 15 to Dec. 1.....	Sept. 1 to Jan. 1.....	.....	.....	.....
Nova Scotia.....	To Oct. 1, 1912.....	Sept. 15 to Dec. 1.....	.....	.....	.....
Newfoundland.....	.....	Sept. 16 to Nov. 16.....	.....	.....	.....
		To Jan. 1, 1912.....	.....	.....	.....

On the 31st of December there were 318 game guardians, being an increase over 1909 of 30. They have been arranged by constituencies as follows:

GAME GUARDIANS BY CONSTITUENCIES.

Alexandra.

Walter Avery.....	Vermilion.
Jos. Heathcote.....	Kitscoty.
D. H. Moore.....	Islay.
J. R. Carter.....	Wainwright.
L. L. Pound.....	Ribstone.

Athabasca.

Wm. Biggs.....	Fort McMurray.
Peter Loutit.....	Fort Chipewyan.
C. A. Walker.....	Wabiscaw.

Camrose.

J. G. Dempsey.....	Heather Brae.
A. W. Fleming.....	Ohaton.
R. W. Logan.....	Camrose.
Wm. Mohler.....	Round Hill.
A. Mickleburgh.....	Spilstead.
Jas. Price.....	Heather Brae.
H. G. Pithouse.....	New Sarepta.
Chas. Spilstead.....	Spilstead.
O. T. Wilson.....	Camrose.

Calgary.

Neil Brodie.....	Calgary.
S. E. Beveridge.....	Calgary.
D. W. Campbell.....	Calgary.
G. M. Grahame.....	Calgary.
A. O. Wheeler.....	Calgary.

Cardston.

John Geo. Brown.....	Waterton Mill.
A. A. Caldwell.....	Caldwell.
Jno. Sloan.....	Kimball.
Wm. F. Tolley.....	Mountain View.

Claresholm.

Travis Bagley.....	Meadow Creek.
Wm. Lyndon.....	Lyndon.

Cochrane.

E. H. Abell.....	Cochrane.
E. L. Bell.....	Dog Pound.
Ernest Bell.....	Lochend.
Percy Bassett.....	Cochrane.
J. A. W. Fraser.....	Jumping Pond.
Wm. Graham.....	Dog Pound.
G. E. Goddard.....	Cochrane.
Chas. Grayson.....	Cochrane.
W. Hutchinson.....	Cochrane.
Geo. W. Johnston.....	Cochrane.
L. H. Kennedy.....	Glenbow.
R. W. Meiklejohn.....	Cochrane.
Geo. McLeod.....	Crossfield.
R. G. Robinson.....	Calgary.
D. W. Skinner.....	Sampsonston.
E. V. Thompson.....	Dog Pound.

Didsbury.

Gordon Henson.....	Sterlingville.
John McLeod.....	Sunnyslope.
Wm. McIntyre.....	Didsbury.
Jas. Russell.....	Rosebud.
Robt. Scott.....	Carstairs.
Edwin Godden.....	Tapscott.
D. J. McKay.....	Wabiscaw.

Edmonton.

B. F. Blackburn.....	Edmonton.
Geo. Bulmer.....	Edmonton.
W. H. Cooper.....	Edmonton.
J. V. E. Carpenter.....	Edmonton.
Jno. Fielders.....	Edmonton.
J. O'Neill Hayes.....	Edmonton.
J. B. Mercer.....	Edmonton.
Martin L. Miller.....	Edmonton.
W. S. Robertson.....	Edmonton.
H. E. Rudd.....	Edmonton.
Hugo Turnbull.....	Edmonton.
C. Wilcox.....	Edmonton.

Gleichen.

B. H. Bunney.....	Gleichen.
David Brereton.....	Red Deer, Gleichen.
W. W. Brown.....	Strathmore.
Wm. C. Davey.....	Airdrie.
Geo. B. Hull.....	Strathmore.
Dan. Martin, Jr.....	Rosebud Creek.
J. C. Oswald.....	Crossfield.
J. A. Wilson.....	Red Deer, Gleichen.
John Clark, Jr.....	Gleichen.
Edward M. Bruce.....	Cluny.
Wm. Service.....	Gleichen.
A. F. Maley.....	Brooks.

High River.

Wm. A. Dunlop.....	High River.
Wm. H. Escourt.....	High River.
John A. Grant.....	Lineham.
Romain Gervais.....	Loma.
J. L. Sexsmith.....	High River.
S. J. Brown.....	Aldersyde.
Hugh McFarlane.....	Loch Sloy.
D. M. Riddle.....	Baronet.
Fred Kuck.....	Pekisko.
E. R. Baker.....	Pekisko.

Innisfail.

F. W. Archer.....	Innisfail.
Jas. Fairs, Jr.....	Trenville.
B. Hunford.....	Markerville.
R. Milligan.....	Pine Lake.
H. M. Mustard.....	Markerville.
R. Morton-Bell.....	Trenville.
Edmund Robinson.....	Stauffer.
W. H. Robinson.....	Stauffer.
J. K. Robinson.....	Little Red Deer, Innisfail.
Wm. L. Scott.....	Markerville.
Guy Thaw.....	Raven.

Lacombe.

T. A. Brereton.....	Clive.
A. J. Boyd.....	Lacombe.
Jos. Capron.....	Blackfalds.

J. C. Carritt.....	Bentley.
Sidney Godfrey.....	Lacombe.
Jas. P. Kent.....	Lacombe.
W. B. McPherson.....	Bentley.
Chas. Pinnell.....	Alix.
Walter Parlbby.....	Alix.
Wm. Smith.....	Lockhart.
Fred Stephens.....	Lacombe.
J. E. Triplett.....	Forshee.
W. Waghorn.....	Blackfalds.
W. E. Wells.....	Whitebrush.
C. D. Aldridge.....	Wittenburg.

Lac Ste. Anne.

D. Musselman.....	Onoway.
J. V. Maloney.....	Roydale.
Frank Pegrum.....	Wabamun.
W. K. Shields.....	Wabamun.
Henry White.....	Wabamun.
L. J. Swift.....	Lac Ste. Anne.
Geo. Braithwaite.....	Rexboro.

Leduc.

A. R. Bush.....	Leduc.
W. F. Blades.....	Leduc.
Chas. Blackwood.....	Templeton.
Jos. Brissard.....	Beaumont.
F. Clifford.....	Conjuring Creek.
Jonah Erwin.....	Leduc.
F. B. Green.....	Bonnie Glen.
Wm. Hudson.....	Buford.
E. O'Mara.....	O'Mara.
Nels Peterson.....	Millet.
Nels A. Sanders.....	Thorsby.
Carl Herbert Ohrn.....	Ohrnville.
C. H. Murphy.....	Thorsby.
Walter Sahlstrom.....	Thorsby.

Lethbridge City.

H. Case.....	Lethbridge.
H. P. Withers.....	Lethbridge.

Medicine Hat.

J. H. G. Bray.....	Medicine Hat.
Geo. Murray.....	Seven Persons.
Wm. Rutherford.....	Medicine Hat.
R. Rutherford.....	Irvine.
Haydon Newton.....	Medicine Hat.
Jas. Robinson.....	Josephsburg.

Macleod.

John Cochlin.....	Macleod.
G. Pearson.....	Standoff.
P. J. Roberts.....	Macleod.

Nanton.

T. B. Stanford.....	Stavelly.
J. M. Hughes.....	Nanton.

Okotoks.

Frank C. Austin.....	DeWinton.
Eric W. Buckler.....	Black Diamond.
E. G. May.....	R.R. No. 2, Calgary.
G. A. Reid.....	Botterel.

Olds.

Sam. Arnold.....	Bowden.
Thos. Byron.....	Eagle Hill, Olds.
A. C. Distman.....	Trochu Valley.
Jas. Jensen.....	Knee Hill Valley.
Swan Starken.....	Garrington.
Colin Thomson.....	Red Lodge.
Evan Thomson.....	Red Lodge.

Pakan.

G. W. Shortridge.....	Caskeyville.
Louis Nap. Despins.....	Brosseau.
John Borwick.....	Saddle Lake.
A. G. McCartney.....	Moose, Tyrol.
Geo. Yealands.....	Pakan.

Peace River.

W. S. O. English.....	Spirit River.
Jno. P. Gaudet.....	Peace River Crossing.
Robt. Jones.....	Fort Vermilion.
Alex. Monkman.....	Grand Prairie.
Duncan McDonald.....	Dunvegan.

Pembina.

T. A. Clark.....	Pembina.
F. Cosens.....	Sion.
Jos. R. Romeo.....	Peavine.
J. Mennier.....	Mossie.
Arthur Lucas.....	Clyde.

Pincher Creek.

R. B. Clarkson.....	Pincher Creek.
L. Garrault.....	Pincher Creek.
Ernest Hillier.....	Twin Butte.
A. Hughson.....	Lundbreck.
Geo. E. Porter.....	Livingstone.
Wesley Shannon.....	Twin Butte.
J. W. T. Swinney.....	Yarrow.
T. G. Wilson.....	Livingstone.
D. F. W. Willock.....	Pincher Creek.
Henry Riviere.....	Pincher Creek.

Ponoka.

B. F. Craig.....	Bluff Centre.
Jas. Everts.....	Wittenburg.
Louis Fleming.....	Ponoka.
A. B. Fraser.....	Ponoka.
A. D. Horn.....	Manfred.
Jno. Schnoor.....	Ponoka.
P. R. Stewart.....	Earlville.
A. Davidson.....	Buckhorn.
J. H. Beeley.....	Rimbey.
O. L. Webster.....	Ponoka.

Red Deer.

Richard Bleay.....	Red Deer.
W. H. Cottingham.....	Red Deer.
F. B. Fisher.....	Red Deer.
J. S. Kendall.....	Red Deer.
C. P. Mellor.....	Red Deer.
Jas. Webb.....	Erskine.
Jos. Wallace.....	Red Deer.

Rocky Mountain.

Adam M. Baptie.....	Exshaw.
H. P. E. Francis.....	Pekisko.
D. McDougall.....	Banff.

Sedgewick.

C. J. Brady.....	Leopoldville.
A. A. Burnham.....	Viking.
J. W. BuDord.....	Hardisty.
Chas. F. Lyall.....	Strome.
L. B. Matusch.....	Amisk.
J. S. McDonald.....	Sedgewick.
F. de Pass.....	Strome.
Elmer Reid.....	Harland.
T. S. Robson.....	Killam.
Norman Stickle.....	Brownfield.
M. H. Ward.....	Sedgewick.
J. D. Rae.....	Chinook.

St. Albert.

Wm. Fitzgerald.....	St. Albert.
Patrick Kelly.....	St. Albert.
Camille Verstracte.....	Villeneuve.
C. McLaughlin.....	Cardiff.

Stettler.

E. W. Barrett.....	Kanata.
Henry Brace.....	Britain.
H. D. Critchley.....	Red Willow.
Chas. E. Ducloy.....	Content.
J. S. Grose.....	Erskine.
W. B. Gray, J.P.....	Stettler.
W. W. Harrington.....	Ewing.
Gus. Lensman.....	Mayville.
J. C. Myers.....	Foreman.
S. Norton-Taylor.....	Gleichen.
G. S. Wilson.....	Stettler.
J. C. Trenaman.....	Hand Hills.
Count Pierre de Soucy.....	Castor.
M. A. Malott.....	Castor.

Strathcona.

F. S. Ellett.....	Sandy Lake, Strathcona.
D. Grummett.....	Cooking Lake.
Chas. Helpenstine.....	East Clover Bar.
James Inkster.....	Strathcona.
Hamilton Lackey.....	East Clover Bar.
J. E. Smith.....	Strathcona.
W. H. Stephens.....	Strathcona.
W. F. Wilkinson.....	Clover Bar.
Lawrence Adamson.....	Strathcona.
J. W. McLaggan.....	Strathcona.
J. W. Tipton.....	Strathcona.
J. A. Dunn.....	Strathcona.

Stony Plain.

J. B. Butchart.....	Stony Plain.
Jno. Bennett.....	Mewassin.
Chas. Currie.....	Graminia.
S. J. Deans.....	Brightbank.
E. A. Groat.....	Spruce Grove Centre.
M. L. Hoffman.....	Mewassin.
S. C. Hagen.....	Winterburn.
Henry Kubl.....	Goldenspike.
V. J. MacGillycuddy.....	Stony Plain.
Dan. McDonald.....	Mewassin.

G. Sutherland.....	Spruce Grove.
E. Pinchbeck.....	Winterburn.
F. J. Jenkins.....	Tomahawk.
Murock McKinlay.....	Stony Plain.
Andrew Jasperson.....	Stony Plain.
E. Fleming.....	Woodbend.
Elmer Sims.....	Golden Spike.

Sturgeon.

R. Bailey.....	Namao.
Jno. A. Edgson.....	Edison.
W. R. Gibbons.....	Battenburg.
Robt. June.....	Namao.
Jno. Kennedy.....	Edmonton P.O.
John Milligan.....	New Lunnon.
Wm. Mason.....	Bon Accord.
John Russell.....	Athabasca Landing.
O. T. Tratt.....	Lamoureux.
J. R. Trotter.....	Lamoureux.
Wm. E. Whiteley.....	Landing Road, Edmonton.
W. W. Watt.....	Northbank.

Vegreville.

Geo. Cookson, Jr.....	Tofield.
Lacy Gully.....	Vegreville.
A. H. George.....	Lavoy.
E. R. Hallberg.....	Chipman.
G. A. Loades.....	Harland.
Jos. Lavoy.....	Lavoy.
Hubert Morton.....	Lavoy.
Jos. A. Norm.....	Logan.
C. C. Roberge.....	Logan.
Jno. Stonehocker.....	Lavoy.
A. S. Shandro.....	Shandro.
J. A. Stewart.....	Beaver Lake, Mundare.
John Trimble.....	Vegreville.
Basil White.....	Bittern Lake.
Andrew Watson.....	Chipman.
E. H. Wynn-Mackenzie.....	Warwick.
Augustus Gladena.....	Tofield.
A. W. Hunt.....	Tofield.
Wm. Howreliak.....	Shandro.
Percy E. Lynn.....	Warwick.
S. W. Calvert.....	Chipman.
A. R. Moody.....	Beaver Lake.

Vermilion.

W. H. Armitage.....	Mannville.
Noah Booher.....	Mannville.
J. Graham.....	Vermilion.
H. G. Morris.....	Mannville.
D. L. Phillbrick.....	Myrnam.
N. Vanarsdalen.....	Vermilion Valley.
F. V. West.....	Vermilion.
Wm. McCormick.....	Tyrole.
D. C. McCormick.....	Innisfree.
W. Good.....	Vermilion.

Victoria.

John Krebs.....	Fort Saskatchewan.
J. A. Libbey.....	Fort Saskatchewan.
E. Simmons.....	Fort Saskatchewan.
A. W. Coxford.....	Lamont.
Theo. Nemirsky.....	Wostok.
A. S. Florence.....	Fedorah.

Wetaskiwin.

A. H. Barnard.....	Wetaskiwin.
A. R. Dickson.....	Wetaskiwin.
R. R. Cherrington.....	Wetaskiwin.
R. T. Hawkins.....	Wetaskiwin.
C. H. Swanson.....	Wetaskiwin.
A. G. Wood.....	Wetaskiwin.
John G. Wilsher.....	Lewisville.
R. C. Young.....	Millet.

II.—PREVENTION OF PRAIRIE FIRES.

I regret that it is again necessary to censure the settlers who were responsible for the greater number of the prairie fires kindled since the first of January.

The past spring being exceptionally dry the conditions were unusually favourable for fires to run and although there was not as much property destroyed as during the fall of 1909 there were just as many fires, the result being that the present year will be a record breaker for the number of convictions secured. Owing to the exceptionally dry weather during the early part of the summer it was thought that fires in the fall would not only be very numerous but very destructive. The writer forwarded to all fire guardians and *ex officio* fire guardians, a circular letter as follows:

EDMONTON, AUGUST 24, 1910.

SIR,—

I beg to advise you that, owing to the unusually dry season which continues to exist, the danger to life and property throughout this province from prairie and forest fires will be greater than usual.

I would therefore request all fire guardians, whether *ex officio* or otherwise, to endeavour to prevent fires running at large in their districts. This may be accomplished by requesting their friends and neighbours to refrain from kindling fires for the purpose of destroying rubbish or clearing land until all possible danger of fire running is past. In every case where a fire has been kindled without taking the necessary precautions provided for by the Ordinance, fire guardians should call out a sufficient number of adult persons (see Section 11) to extinguish same before it secures too much headway.

I also think in every case where it has been found necessary to prosecute and a conviction has been secured, that guardians should press for heavier penalties than have generally been imposed in the past. With all the convictions which have been secured in the last few years the result has not been a reduction in the number of destructive fires. The public apparently considers it cheaper to take chances of being convicted (considering the usual penalty imposed) than to comply with the provisions of sections 4 and 6 of the Ordinance by constructing the necessary fire guards.

This department, therefore, trusts that fire guardians will do what they can towards protecting life, property, fall pasturage and feed from destruction by prairie and forest fires in their respective districts, or in any part of the province where they may come in contact with fires.

Thanking you for your past services in the interest of your district,

I am, Sir, your obedient servant,

(Signed) BENJ. LAWTON,
Chief Fire Guardian.

Owing, however, to the rainfall during the late summer and early fall being greater than usual, together with the co-operation of fire guardians, there were very few fires of any consequence.

As in former years the great majority of convictions were secured by the Royal North-West Mounted Police.

The penalties imposed, and the number of convictions secured during 1907, 1908, 1909 and 1910 as shown by reports received are given below and although the average penalty imposed in 1910

is not as heavy as either 1907 or 1909 it is greater than that of 1908. It appears that an increase in the number of convictions does not necessarily mean an increase in the amount of the average fine.

The penalties imposed range from one to one hundred dollars.

	NO. OF CONVICTIONS REPORTED	TOTAL FINES	AVERAGE FINE
1907.....	33	\$741.00	\$22.45
1908.....	105	1,570.00	14.95
1909.....	94	1,796.00	19.10
1910.....	247	4,247.38	17.20

Fire guardians were this year, for the first time, furnished with badges. They are now in a position to show their authority when requested to do so by any person who may question their right to order them to proceed to any fire for the purpose of extinguishing same.

The following is a list of duly appointed fire guardians arranged by constituencies:

Alexandra.

Ben. Roberts.....	Kitscoty.
T. F. Sheridan.....	Wainwright
E. A. Tonkin.....	Dewberry.
R. A. Wilson.....	Dewberry.
F. Skinner.....	Dewberry.
C. Websdale.....	Dewberry.

Calgary.

D. Carter.....	Calgary.
Dan. W. Campbell.....	Calgary.
G. M. Grahame.....	Calgary.
Geo. Johnston.....	Calgary.
Sidney H. Moss.....	Calgary.
Walter Moss.....	Calgary.
J. G. McIntosh.....	Calgary.
R. W. McIntyre.....	Calgary.
W. A. Thompson.....	Calgary.
A. O. Wheeler.....	Calgary.
W. D. Woolliams.....	Calgary.

Camrose.

Jno. Barber.....	Iron Creek, Spring Lake.
Geo. Bowie.....	Ferry Point.
Francis J. Hodgson.....	New Sarepta.
Chas. Johnston.....	Edberg.
Ernest Roper.....	Bittern Lake.

Cardston.

Percy G. Ashe.....	Coutts.
V. S. Shaw.....	Cardston.

Claresholm.

W. A. Lyndon.....	Lyndon.
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Cochrane.

E. Bell.....	Bradbourne.
W. H. Croxford.....	Airdrie.
Walter B. Elliott.....	Cochrane.
Herbert Fry.....	Cochrane.
Gilbert E. Goddard.....	Mitford.
Wm. Grahame.....	Bradbourne.

M. McPhee.....	Beaver Dam, Cochrane.
R. I. Nixon.....	Crossfield.
Geo. A. Reid.....	Cochrane.
Johnston Stevenson.....	Airdrie.
Jas. A. Sutherland.....	Crossfield.
Wm. Urquhart.....	Crossfield.

Didsbury.

Arthur Evans.....	Three Hills.
Jno. McLeod.....	Sunnyslope.
J. D. Shantz.....	Didsbury.

Edmonton.

J. O'Neill Hayes.....	Edmonton.
Arch. Mitchell.....	Edmonton.
James Tough.....	Edmonton.
Hugo Turnbull.....	Edmonton.
Donald McEachern.....	Edmonton.

Gleichen.

W. W. Brown.....	Strathmore.
John Clark, Jr.....	Gleichen.
O. G. Colquhoun.....	Gleichen.
John B. Code.....	Dorothy.
Thos. Hicks.....	Lathom.
Douglas Hardwick.....	Snake Valley, Gleichen.
Jas. Lawson.....	Dorothy.
A. S. Maloney.....	Dunbow.
Dan. Martin, Sr.....	Gleichen.
L. McKinnon.....	Langdon.
Alex. Strange.....	Gleichen.
Harry Scoot.....	Gleichen.

High River.

Romain Gervais.....	Loma.
W. E. Holmes.....	High River.
Wilfred B. Thorne.....	Aldersyde.
Richard P. Carle.....	Pekisko.

Innisfail.

R. P. Alford.....	Pine Lake.
Wm. Shirley Bitton.....	Knee Hill Valley, Innisfail.
Count L. M. de Chauny.....	Innisfail.
Harry F. Collins.....	Pine Lake.
Geo. Duncan.....	Innisfail.
Geo. W. Ellis.....	Innisfail.
Geo. Fleming.....	Penhold.
Fred W. Gaetz.....	Pine Lake.
R. Morton-Bell.....	Trenville.
H. M. Mustard.....	Markerville.
Robt. Wynn.....	Knee Hill.

Lethbridge City.

Duncan Duff.....	Lethbridge.
Jas. Dixon Fuller.....	Lethbridge.
Edward Kennedy.....	Lethbridge.
Adam Link.....	Lethbridge.
A. C. Nash.....	Lethbridge.

Lethbridge District.

E. Cox.....	Grassy Lake.
Warren Depew.....	Raymond.
Jno. Furman.....	Grassy Lake.
E. Kenny.....	Pothole, Lethbridge.

C. McCarty.....	Raymond.
O. H. Otott.....	Optic.
D. K. Slawson.....	Burdette.
Frank O. Steed.....	Stirling.

Leduc.

Wm. Blocker.....	Leduc.
Henry Bradner.....	Leduc.
Frank Clifford.....	Conjuring Creek.
S. W. Fetherstone.....	Leduc.
S. H. Johnson.....	Beaumont
Chas. Mortimer.....	Leduc.
J. McEwan.....	Conjuring Creek.
C. H. Ohrn.....	Ohrnville.
Nels A. Sanders.....	Ohrnville.

Lacombe.

Ed. Burns.....	Lamerton.
Jas. Burgess.....	Lamerton.
Jos. Capron.....	Blackfalds.
W. E. Grose.....	Clive.
Horace Hickling.....	Alix.
Carl Hilstadt.....	Bentley.
H. A. Murphy.....	Lacombe.
S. W. Paisley.....	Canyon.
Chas. Pinnell.....	Alix.
Albert T. Richards.....	Lacombe.
James Tees.....	Clive.
W. E. Tees.....	Tees.
Jas. L. Walters.....	Tees.
F. H. Whitside.....	Lamerton.

Lac Ste. Anne.

D. Musselman.....	Onoway.
H. White.....	Wabamun.

Medicine Hat.

Wm. Borthwick.....	Medicine Hat.
W. H. Hargrave.....	Walsh.
Geo. Markham.....	Medicine Hat.
J. D. McLaughlin.....	Medicine Hat.

Macleod.

Wm. F. Cochrane.....	Macleod.
C. W. E. Gardner.....	Macleod.
Fred T. Maryfield.....	Macleod.

Nanton.

J. D. Narrish.....	Nanton.
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Olds.

C. Distman.....	Olds.
Raymond A. Kembry.....	Olds.
C. Wm. Moore.....	Tolman.
Chas. T. Wood.....	Red Lodge.
W. T. Wypdham.....	Huxley.
J. I. Brewster.....	Bowden.

Okotoks.

A. E. Bannister.....	Davisburg.
J. A. W. Fraser.....	Jumping Pond.
Chas. W. Mickle.....	Spring Bank.
A. G. Wooley-Dod.....	Midnapore.

DEPARTMENT OF AGRICULTURE

Ponoka.

O. C. Ravensburg.....	Asker.
Robt. E. Tyner.....	Ferrybank, Ponoka.

Pincher Creek.

Alf. T. Connoly.....	Pincher Creek.
W. T. Eddy.....	Cowley.
F. W. Godsall.....	Cowley.
Geo. Porter.....	Livingstone.
Harold J. Smith.....	Pincher Creek.

Pakan.

Lewis Thompson.....	Pakan.
F. Flamand.....	Brosseau.
F. DuBord.....	Darlingville.

Red Deer.

Robt. E. Fiske.....	Hillsdown.
F. B. Fisher.....	Red Deer.
Fred Gaetz.....	Red Deer.
Thos. Hoskin.....	Red Deer.
Angus Martin.....	Red Deer.
—, McKuchney.....	Red Deer.
J. F. Reinholt.....	Red Deer.
Jno. Wilson.....	Evarts.
A. J. Frid.....	Pitcox.
James Leish.....	Pitcox.
W. Gerber.....	Evergreen.
T. Hollander.....	Evergreen.

Rocky Mountain.

Jas. B. Bruneau.....	Blairmore.
Wm. H. Brewster.....	Banff.

St. Albert.

W. S. Hughson.....	Manawan.
Thos. Hall.....	Manawan.
Camille Verstracte.....	Villeneuve.

Stony Plain.

H. H. Knapp.....	Winterburn.
Chas. Mills.....	Inga.
J. L. McDonald.....	Stony Plain.
Ed. Steffler.....	Spruce Grove Centre.

Stettler.

J. F. DuBois.....	Hand Hills, via Stettler.
Jas. Ellwood.....	Gopher Head.
Gus. Lensman.....	Mayville.
B. Lockwood.....	Hand Hills, via Stettler.
N. A. Lund.....	Hand Hills, via Stettler.
Wm. W. Peters.....	Notre Dame de Savoy.
Geo. W. Petterson.....	Red Willow.
J. G. Savage.....	Delia.
G. W. Davidson.....	Big Valley.

Sedgewick.

E. W. Brightland.....	Talbot.
W. Eastmead.....	Casleyville.
W. E. Reed.....	Casleyville.
Ludwig H. Seeman.....	Vallejo.
N. B. Weffer.....	Casleyville.
H. M. Jones.....	Ethelwyn.
John Grant.....	Ethelwyn.

Sturgeon.

W. R. Gibbons.....New Lunnon.

Strathcona.

Chas. C. Ellet.....Strathcona.
 Geo. McAllister.....Strathcona.
 Ed. Townsend.....Strathcona.

Vegreville.

John Borwick.....Whitford.
 Silas Richardson.....Whitford.

Vermilion.

W. C. Talbot.....Irma.
 A. M. Weir.....Mannville.

Victoria.

Chas. E. Bevington.....Fort Saskatchewan.
 Henry Belcher.....Wostok.
 Jos. Dziwenka.....Wostok.
 Jno. Halkow.....Wostok.
 David McGall.....Star.
 W. L. Simmons.....Fort Saskatchewan.
 Theo. Nemirsky.....Wostok.

Wetaskiwin.

Haydon Newton.....Wetaskiwin.

Respectfully submitted,

BENJ. LAWTON,
Chief Game and Fire Guardian.

5.—REPORT OF THE POULTRY SUPERINTENDENT.

SIR,—I beg to submit herewith the annual report of the Poultry Branch of the Department. I am pleased to state that there has been a much greater interest manifested in poultry than in former years. Not only is this very noticeable in connection with the office work but I am informed by the poultry producers of the province that there is a marked improvement both in the quantity and quality of poultry offered for market.

OFFICE WORK.

Since the office of this branch has become generally known a larger number of people both within and without the province have communicated with me on many subjects in connection with the work.

Persons desiring to undertake poultry raising have written inquiring as to the best breeds and methods of handling poultry, the construction of poultry houses for both small and commercial plants, and other matters of interest.

During the year there has been a great many inquiries for poultry for breeding purposes and for eggs for hatching. This demand has been much greater than I anticipated.

From letters received from all parts of the province, and from Saskatchewan and Manitoba as well, I am led to believe that disease has been more prevalent during the year than usual, largely due, no doubt, to the extended dry and generally unseasonable weather during the summer.

NEW POULTRY BULLETIN.

Applications have been received almost daily for Poultry Bulletin No. 1, "Advanced Methods of Poultry Farming," and the supply of same is almost exhausted. In view of this fact I have been preparing for publication another bulletin of a much more extensive nature than Bulletin No. 1. This bulletin is intended to meet the advanced knowledge the people have acquired since the last one was issued and as a result of the educational work that has been conducted in connection with the Farmers' Institutes and Short Course Schools. Many new subjects are dealt with, such as ventilation of poultry houses, the colony system of housing, commercial poultry plants, rearing chicks without artificial heat, line breeding, preparing poultry for exhibition and other matters not found in the former bulletin. For some time past I have been gathering photographs and the new bulletin will be illustrated with a number of original cuts.

BULLETIN ON MARKETING OF EGGS.

I have also prepared for your approval a bulletin on the marketing of eggs from the producer to the consumer, dealing entirely with the care and handling of eggs by the producers and dealers with the object of securing for the consumers a better quality of eggs. The standards set forth in this bulletin have been endorsed by the larger dealers who are prepared to pay a higher price for eggs marketed according to same.

EDUCATIONAL WORK.

During the year the educational work of this branch has been more extended than in former years. The usual number of poultry institute meetings have been held throughout the province with a larger and more enthusiastic attendance than ever. In this work the department has received valuable assistance from Mr. E. J. Cook, Lethbridge, and Miss Nora Trench, Alix.

Three short course schools were also held in connection with the regular short course schools at Lethbridge, Olds and Vegreville. At each of these incubators were operated and the hatching results were exceptionally good considering the unfavourable season of the year and the conditions under which they were operated. The schools being of but two weeks duration made it necessary to set the incubators previous to the opening of the school and then transfer them to the class room for the course. In the case of the Vegreville school the eggs were incubated for two weeks in Edmonton and transferred to Vegreville by express. Reasonably good results occurred even under these conditions.

Practical demonstration of the rearing of the chicks hatched at each school was given in the class room, the chicks being reared in the heatless brooder. The chicks were expressed in these brooders from Lethbridge to Olds and from there to Vegreville and back to Edmonton by freight in very cold weather with practically no losses, demonstrating that baby chicks can be successfully shipped in Alberta as in the eastern provinces and states.

Among other subjects dealt with were: Poultry House Construction, Poultry Appliances, The History and Development of Breeds, Line Breeding, Feeds and Feeding, The Selection and Mating of Breeding Stock, Winter Egg Production, Strain Building, Incubation, Hatching, Rearing, The Use of the Trap Nest, Crate Feeding, Markets and Marketing, Judging of Poultry, Demonstrations in Killing, Plucking and Preparing for Market.

Models of poultry appliances and houses were made and exhibited at the Edmonton and Calgary exhibitions where instructors were on hand to give information to those desiring same. Owing to the pressure of office and other work I was unable to attend many of the local agricultural fairs and judge the poultry as in former years. I am pleased to state, however, that at all the fairs attended I found a far greater number of exhibits and of a higher quality than formerly, and with one or two exceptions no exhibits subject to disqualification.

The winter poultry shows have also shown a marked improvement and a much greater interest in producing high-class exhibition stock. The assistance offered by the department in paying prize money to the extent of \$300 has encouraged the organization of poultry associations and there are now some six or seven poultry shows held where three years ago there were but two. From correspondence to hand it is possible that two or three more poultry associations will be added to the list during the coming winter.

POULTRY BREEDING STATION.

Early in the year the poultry plant was placed in charge of Mr. H. W. Scott, B.S.A., who for some time previous was connected with other branches of the department. Mr. Scott has made a great success of the work. Experiments have been started

in the matter of housing and feeding, incubation, cold brooder rearing and also to ascertain as to whether hens or pullets produce eggs with the strongest fertility.

I may say that the experiments conducted with the cold brooders proved most successful. These brooders were made 18 inches square and 8 inches deep. In front of the brooder a door four by six was made, and on each side of the brooder two and one-half inches from the bottom at equal distances apart three one-inch holes were bored for ventilation. Two inches below the top of the box above the auger holes a strip one inch by eight inches was cut out and the opening covered with cotton. The top of the box consisted of a light wooden frame covered with cotton which was bagged to take the shape of the nest. Over this was placed several thicknesses of cotton batten, the number depending on the weather. The bottom of the brooder was filled with chaff to within about two and one-half inches from the cotton, the object being to have space only for one chick deep to prevent them from crowding on top of each other. About forty chicks were placed in each brooder and kept there for a couple of weeks. When they became too large for this brooder they were divided and placed in larger brooders of the same pattern. These brooders are placed in the regular colony brooder houses in the early season and later in the season they are placed out of doors on the ground, protected by a frame covered with oiled cotton to keep out the rain.

EGG PRODUCTION.

During the winter the hens laid a much greater number of eggs than during the previous winter and these were readily sold at from 50 to 60 cents per dozen.

As a result of the trap nest work and selection of the breeding stock I am pleased to say that there has been a decided improvement in the egg production. It will be noticed from the report submitted herewith that there was an average increase per hen of 12.15 eggs for the ten months of 1910 as compared with the 12 months of 1909.

The following is a comparison of the year 1909 with 10 months of 1910:

MONTH	1909			1910		
	NO. BIRDS	NO. EGGS LAID	AVERAGE PER HEN	NO. BIRDS	NO. EGGS LAID	AVERAGE PER HEN
January	282	365	1.22	196	1,017	5.18
February	281	653	2.32	201	1,735	8.64
March	261	1,472	5.63	234	2,483	10.61
April	256	2,309	9.00	221	2,345	10.61
May	214	1,857	8.67	210	2,340	11.14
June	124	667	5.37	180	976	5.42
July	91	498	5.47	153	671	4.39
August	83	402	4.81	134	395	2.95
September	80	295	3.68	130	213	1.64
October	105	128	1.12	128	130	1.06
November	213	126	.59	...	...	...
December	240	366	1.52	...	...	...
Yearly average			49.40			61.65

EGGS FOR HATCHING.

The demand for eggs for hatching was so great that we were able to supply but a very small portion of the orders received. The eggs available were distributed to the best possible advantage and many reported exceptionally good hatches. I think, however, that the percentage of fertility should have been higher. It is possible that this is accounted for in the fact that the birds laid prolifically during the winter months. During the past two winters our object has been to demonstrate that by giving proper care and feed it is possible to get a good supply of eggs during the cold weather. Having demonstrated this beyond question it is now proposed to retard the winter laying to a great extent in order to secure a large number of eggs during the hatching season and it is hoped a higher percentage of fertility.

ENLARGEMENT OF BREEDING STATION.

The capacity of the breeding station being inadequate to meet the demands of the province, it has been enlarged to double its former capacity. The new houses have been built with a view to economy and experiments in different systems of ventilation.



CURTAIN FRONT HOUSE AT PROVINCIAL POULTRY STATION. BUILT OF SINGLE PLY LUMBER WITH COTTON INSTEAD OF GLASS IN WINDOWS.

The house here illustrated is eight feet wide and 72 feet long, divided into six pens of 12 ft. each. Every second pen is divided with a solid partition so that three experiments can be conducted at the same time. The studding is four and a half feet at the rear and 6 feet in the front. The interior fixtures are similar to those recommended in other houses with the exception that the nests are constructed two feet from the ground giving all the floor space for the use of the birds. The enclosure is made with one thickness of V joint lumber on the north side and ends. The front, facing south, is constructed with 1 1/2 inches of V joint lumber in the bottom and filled in above with cotton tacked on frames that are hinged in order that they may be readily opened or closed. The

openings are covered with poultry netting so that when the frames are raised the birds are enclosed in an open shed house. The plan of this house was decided on after two years of experiments with our ordinary colony brooder houses which are built in somewhat the same style.

Two new houses have also been constructed of the colony house type. These houses are eight feet by 12 feet enclosed with V joint lumber. The roof in each case being of the same material. Boards are placed from plate to plate some three or four inches apart and the apex filled with straw for ventilation. In each end of the apex is a hole 18 inches square covered with cotton to allow for a circulation of air through the straw. The roosts and drop boards are placed in the ends of the houses and the nests on one side above the ground leaving all the floor space for the use of the birds.

In all pens of the new houses a drop curtain is used in front of the roosts to protect the birds at night in very cold weather. By way of experiment one of the houses has glass windows while the other has cotton windows. Thermometers will be placed in each of the pens and records made of the temperature.

A TRIP OF INVESTIGATION.

During the past summer I visited several poultry farms and colleges in the eastern provinces, also the Agricultural Colleges at Storres, Connecticut, and Kingston, Rhode Island, as well as several commercial poultry plants in each of these states. During my visit to these places I made observations and obtained information that I hope to put into effective use for the benefit of the poultry interests of this province. I noticed with considerable interest wherever I went that the poultry industry is receiving much greater attention than in former years and is being recognized as an industry rather than a by-product of the farm. I also found a big demand for all kinds of poultry with prices correspondingly high.

On the larger poultry plants particularly in the eastern states the continuous style of poultry house has been to a great extent discarded and the colony house system used instead. These colony houses are scattered over the farm and the birds given free range, no fencing being used except the fence enclosing the farm. On the approach of winter, these houses usually eight feet by 12 feet, are drawn up to some suitable place, making it convenient to care for the birds during the winter months. This system is strongly recommended to anyone intending to undertake commercial poultry farming.

CARLOAD OF PURE BRED POULTRY.

Previous to my going east we had received a large number of orders for breeding stock that we were unable to supply, and while in Montreal made arrangements with Messrs. Gunn, Langlois & Co. to furnish the department with pure bred poultry for breeding purposes as cheaply as possible. Arrangements were also made with Prof. Elford of Macdonald College and Prof. Graham of the Ontario Agricultural College, Guelph, to select the stock for the department. Sufficient orders were received later to warrant the ordering of a carload which was done at the direction of the Minister. Some 1,500 birds were shipped to Alberta and distributed according to the orders on file, a sufficient number being retained by the department to fill the new houses recently erected. Recognizing the



MOUNTAIN GOAT AT BANFF, ALBERTA

importance of the industry and the need of encouraging same the Dominion Government rendered assistance by paying the freight on the shipment.

Inquiries were received for nearly a carload in excess of the stock received, but owing to the lateness of the season it was thought inadvisable to make further importation. This great demand for breeding stock can be taken as evidence of the interest that is now being taken in the industry by the people of the province and the introduction of this carload of stock will, I trust, do much to improve the quality of our poultry.

OTTAWA DELEGATION.

My chief reason for going east was to represent the province on a delegation of poultrymen meeting the Hon. Sidney Fisher, Minister of Agriculture, Ottawa, with reference to poultry matters in general. It was the desire of the delegation that the poultry work undertaken by the Dominion Government should be so adjusted as to be in co-operation with the poultry work carried on by the various provincial governments. The following are the recommendations made by the delegation:

"1. In view of the fact that the supply of poultry products does not meet the demand and that so much of this produce, on account of the poor market conditions is lost, we ask that a Poultry Commissioner be appointed, his duties being to study the question from a national standpoint, taking up such questions as markets, standards, diseases and kindred subjects.

"We also suggest that a conference be held at least once a year, to which the provincial poultry experts be invited. This would obviate overlapping and ensure national provincial co-operation."

"2. Knowing that one of the greatest hindrances to poultry development is the inability to successfully renew the flock, due to diseases of which poultrymen know very little, also that his loss amounts to probably millions of dollars annually, we ask that there be established in this department and under the direction of the Poultry Commissioner, a Department of Scientific Research along the lines of poultry diseases, etc., and that scientifically trained men be appointed to take charge of the work. For the advancement of this work a poultry plant will be necessary, which should be sufficiently large to encounter commercial difficulties.

"3. Since the standardization of poultry products, and co-operation in marketing—work which is of a national character—have already been introduced by the Poultry Producers' Association, it is asked that the Department of Agriculture assume the expense of this work, the association to remain, as at present, an independent organization with its own elected officers, as is the case with the Seed Growers' Association. It is further recommended that the commissioner publish a bulletin dealing with the care and handling of eggs and poultry and the marketing of same. This bulletin should include the classification and standards of poultry produce as recommended by the Poultry Producers' Association.

"4. Since many of the provinces are now operating poultry departments of their own, where experiments of a local character are conducted, and whereas the present poultry plant at the Experimental Farm, Ottawa, is inadequate and out of date, it is the opinion of this meeting that the interests of the poultry industry would be best served if this plant were discontinued as a local experiment, and the equipment with what alterations may be necessary, be given to the use of the Poultry Commissioners in the investigation of poultry diseases, etc.

"5. In consideration of the noble work done for this Dominion by Prof. A. G. Gilbert during the past twenty-five years, we suggest that he be relieved of the personal supervision and management of the poultry plant at the experimental farm, and his services be recognized and retained by appointing him Chief Lecturer in Poultry for the Dominion attached to the Poultry Commissioner's staff."

MARKET STANDARDS.

The delegation further asked that Dominion legislation be enacted providing a standard for the marketing of poultry and eggs throughout the Dominion. By the enactment of such legis-

lation poultry products could be purchased or sold in any part of the Dominion by a recognized grade and the producers, dealers and consumers would each know the exact grade of what they were purchasing.

The Hon. Sidney Fisher promised due consideration to these matters and it is expected that in due time steps will be taken to meet the requirements with regard to a standard as above mentioned.

The following are the gradings asked for:

Classification and Grading for Roasters, Fowl and Capons.

Classification.—Poultry is first classified into chickens, fowl, cock birds, capons, slips, ducks, geese, turkeys, guineas and pigeons, and when packed there is a further classification as to weight. A standard of grading is set for each class and all birds packed must conform to that standard.

Chickens.—The term chickens applies to, (1) pullets that have not laid and are under seven months of age, (2) cockerels that have not developed a hard spur firmly attached to the leg. They are further divided as to weight into broilers and roasters.

Broiler—Usually weighs from 1 to 3 pounds.

Roaster—Usually weighs 3 pounds and upwards.

Fowl.—The term fowl applies to hens of any age.

Cock Birds.—All male birds having hard spurs firmly attached to the leg, including mature birds, without reference to age.

Capons.—Birds successfully caponized when from six to 12 weeks old, showing very little comb and no spurs.

Slips.—Birds not successfully caponized and so showing comb, spurs and generally coarser than capons.

Ducks.—Divided into two classes, Ducklings and Ducks.

Ducklings—Ducks marketed before their first molt, usually from seven to twelve weeks old and weighing from three to five pounds each.

Ducks—All ducks not included under the term duckling.

Geese.—Divided into two classes, Goslings and Geese.

Goslings—Geese marketed before their first molt, usually from seven to twelve pounds.

Geese—(a) Under 10 pounds.

(b) Over 10 pounds.

Turkeys.—Divided into Young and Old Hen Turkeys and Young and Old Toms.

Young Hens—All weights.

Young Toms—Under 12 pounds

Old Hens—All weights.

Old Toms—All weights.

Guineas.—Divided into young and old.

Pigeons.—Divided into Squabs and Pigeons.

Squabs—Pigeons up to the time of leaving the nest, usually about four weeks old.

Pigeons—Birds after they have left the nest.

Grading.—This Grading Applies Only to Roasters, Fowl and Capons.

All the above classes of poultry are graded before being packed, and a standard is set which applies to these classes.

There are four grades, viz.: Selects No. 1, No. 2 and Common.

All the birds must be packed uniformly as to size and weight in each package.

A uniform weight to mean "birds that do not vary more than one pound in weight."

Birds that have been sick or show any signs of disease, birds that have food in the crop, that have decidedly crooked breast bones, that have blood or other dirt upon their bodies, heads or feet shall not be included in these grades.

All birds must be dry picked. Roasters and fowl clean except around the neck. Capons should be dressed capon style. By this is meant the style that has become standard and which requires that the feathers be allowed to remain on a considerable portion of the bird. Leave the feathers on the upper half of the neck. Pick the breast bone clean, pick around the vent and up to the large tail feathers. Pick the entire underside of the wing, all three joints; pick the upper part of the first joint next to the body. Leave the feathers on the upper part of the last two joints including the long wing feathers or flights. Leave the saddle feathers on the back to within two and a half or three inches of the tail.

Cooling should be done gradually but thoroughly before packing, not dipped in water.

All classes should be put on the market undrawn, having head and feet on.

Packages must be distinctly marked, showing the class, the grade, the number, the average weight and the gross, tare and net weight they contain:

GRADED DRESSED POULTRY.

Put up by the

POULTRY PRODUCERS' ASSOCIATION OF CANADA.

Class.....	Grade.....	No.....	Average Weight.....
Gross Weight.....	Tare.....	Net.....	

Selects.—To consist of specially fattened birds; extra well fleshed and of superior finish and appearance, unbroken skin, without blemish, straight breast bone, and neatly packed in packages that hold one dozen birds. Each package shall include birds of uniform size and colour of flesh and legs.

No. 1.—To consist of well fleshed birds of neat appearance but lacking the uniform finish of *Selects*. Packed in neat boxes holding one dozen birds of uniform size and weight.

No. 2.—To consist of fairly fleshed birds, packed in neat boxes holding one dozen.

Common.—To consist of any birds not conforming to the requirements of the above grades, but must be packed in boxes similar to the other grades.

Eggs.

Grading.—It must be remembered that all eggs must be shipped new laid. A new laid egg is an egg that is not over five days old when shipped, an egg that has been gathered promptly and kept in a moderately dry cool place (under 60 degrees), free from foul odors and other contaminating influences.

Rough shelled and abnormal eggs should never be shipped.

Though some markets may call for several grades of eggs as a general rule there is no necessity for many grades. What the best trade demands is freshness, grading uniformity in packing and regularity in supply.

For ordinary purposes two grades of eggs will be found sufficient to satisfy the demands made on the producer, viz.: Newlaid Selects and No. 1. Another grade of common stock may for a time be marketed, but they must not be sold under the brand of the association.

New Laid Selects—To consist of strictly new laid eggs, not over five days old, weighing not less than 24 ounces to the dozen. Clean, of uniform size and colour, packed in substantial neat cases having clean fillers.

No. 1—To consist of new laid eggs, not over five days old, weighing not less than 21 ounces to the dozen. Clean, packed in substantial neat cases with clean fillers.

In conclusion I may say that the general interest taken in poultry throughout the province during the year has been very pronounced. From reports issued by the Dominion Department of Agriculture it would appear that the province leads in percentage of increase in the poultry industry for the year.

The discarding of scrub poultry and the introduction of pure bred varieties combined with a greater interest on the part of the poultry raisers to prepare for market a more uniform quality of products is doing much to establish poultry raising as an important industry in the province.

A. W. FOLEY,
Poultry Superintendent.

6.—REPORT OF THE RECORDER OF BRANDS.

SIR,—I have the honour to submit the following report on the work of this branch of your department for the year ending December 31st, 1910.

During the year 2,474 horse brands and 2,280 cattle brands were allotted, while the transfers numbered 600, changes 43, extracts 28 and searches and estrays 1,447, being a total of 6,872 transactions during the year. The above figures show an increase of 752 horse brands and 486 cattle brands, while the transfers have increased by 105, changes by seven, and extracts, searches and estrays by 245, or a total increase of 1,595 transactions during the year.

For the Province of Alberta alone the horse brands numbered 1,891, cattle brands 1,672, transfers 524, changes 34, extracts, searches and estrays 1,218, being a total of 5,339, which shows an increase of 583 horse brands, 346 cattle brands, 94 transfers, one change and 435 extracts, searches and estrays, or a total increase for the province of 1,459 transactions.

The number of letters received during the year, referring to the Province of Alberta, was 6,440, while the number of documents despatched was 9,632, a total of 16,072, being an increase of 3,494 over the previous year.

I append a statement showing transactions from 1898 up to December 31st, 1910, from which you will notice that the total number of brands on record at 31st of December last was 45,772.

TRANSFERS.

1899.....	132
1900.....	165
1901.....	222
1902.....	265
1903.....	400
1904.....	402
1905 { N.W. Territories.....	299
{ Alberta.....	120
1906 { Saskatchewan.....	80
{ Alberta.....	389
1907 { Saskatchewan.....	72
{ Alberta.....	430
{ Saskatchewan.....	59
1908 { Alberta.....	421
{ Saskatchewan.....	68
1909 { Alberta.....	430
{ Saskatchewan.....	65
1910 { Alberta.....	524
{ Saskatchewan.....	76

CHANGES.

1899.....	27
1900.....	20
1901.....	26
1902.....	43
1903.....	43
1904.....	32
1905 { N.W. Territories.....	7
{ Alberta.....	1
{ Saskatchewan.....	38
1906 { Alberta.....	2
{ Saskatchewan.....	28
1907 { Alberta.....	6
{ Saskatchewan.....	

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1908	{ Alberta.....	29
	{ Saskatchewan.....	4
1909	{ Alberta.....	33
	{ Saskatchewan.....	3
1910	{ Alberta.....	34
	{ Saskatchewan.....	9

SEARCHES AND EXTRACTS.

1899.....	...
1900.....	35
1901.....	42
1902.....	100
1903.....	144
1904.....	124
1905 { N.W. Territories.....	81
{ Alberta.....	13
{ Saskatchewan.....	2
1906 { Alberta.....	73
{ Saskatchewan.....	23
1907 { Alberta.....	73
{ Saskatchewan.....	15
1908 { Alberta (including strays).....	292
{ Saskatchewan (including strays).....	349
1909 { Alberta (including strays).....	783
{ Saskatchewan (including strays).....	447
1910 { Alberta (including strays).....	1,218
{ Saskatchewan (including strays).....	257
Number of brands re-allotted in 1898.....	3,228

CATTLE BRANDS.

1898.....	2,111
1899.....	1,466
1900.....	1,508
1901.....	1,689
1902.....	1,934
1903.....	2,390
1904.....	2,034
1905	{ N.W. Territories..... 1,353
	{ Alberta..... 337
	{ Saskatchewan..... 70
1906	{ Alberta..... 1,894
	{ Saskatchewan..... 641
1907	{ Alberta..... 1,230
	{ Saskatchewan..... 415
1908	{ Alberta..... 1,225
	{ Saskatchewan..... 438
1909	{ Alberta..... 1,326
	{ Saskatchewan..... 468
1910	{ Alberta..... 1,672
	{ Saskatchewan..... 608

HORSE BRANDS.

1898.....	941
1899.....	821
1900.....	886
1901.....	947
1902.....	1,234
1903.....	1,390
1904.....	1,346
1905	{ N.W. Territories..... 985
	{ Alberta..... 248
	{ Saskatchewan..... 89
1906	{ Alberta..... 1,361
	{ Saskatchewan..... 371
1907	{ Alberta..... 1,030
	{ Saskatchewan..... 435
1908	{ Alberta..... 1,103
	{ Saskatchewan..... 352

1909	{ Alberta.....	1,308
	{ Saskatchewan.....	414
1910	{ Alberta.....	1,891
	{ Saskatchewan.....	583

Total brands on record up to 31st December, 1910. 45,772

Total transactions in	1898.....	6,280
"	" 1899.....	2,419
"	" 1900.....	2,621
"	" 1901.....	2,920
"	" 1902.....	3,559
"	" 1903.....	4,367
"	" 1904.....	3,949
"	" 1905 { N.W. Territories.....	2,750
	{ Alberta.....	725
	{ Saskatchewan.....	242
"	" 1906 { Alberta.....	3,755
	{ Saskatchewan.....	1,109
"	" 1907 { Alberta.....	2,791
	{ Saskatchewan.....	930
"	" 1908 { Alberta.....	3,070
	{ Saskatchewan.....	1,211
"	" 1909 { Alberta.....	3,880
	{ Saskatchewan.....	1,397
"	" 1910 { Alberta.....	5,339
	{ Saskatchewan.....	1,533

JAS. WILSON,
Recorder of Brands.

7.—REPORT OF SUPERINTENDENT OF FAIRS AND INSTITUTES.

SIR,—I have the honour to submit herewith a report for the year 1910 on the educational work undertaken in the interests of agriculture and on the work of the agricultural societies throughout the province.

I.—EDUCATIONAL WORK.

I am glad to be able to report that there has been a steady advance in the interest taken in institute work. There has been no material change in the institute system in operation other than the developing of the short course work inaugurated a year ago. In the regular institute work an attempt has been made to introduce meetings in new settlements. In some cases long drives have been made from the line of railway to reach these new settlements, and in every case the interest and attendance has been most encouraging. In fact the attendance at points removed from the railway has been considerably larger than that in the more thickly settled districts. While the expense incurred in reaching remote districts is considerable yet, there can be no doubt that the money is well spent. I am inclined to think that too many institute meetings have been held at some of the older towns in the province, with the result that the attendance at these meetings has decreased in late years.

Farmers' Institute Meetings.

The following is a list of meetings addressed by Mr. J. G. Clark, of Irma, who spoke on the following subjects: "The Ideal Dairy Animal," "Building up a Dairy Herd," "Feeding, Care, Management and Stabling of Dairy Animals," and Mr. Geo. W. Scott, Creamery Inspector, Innisfail, who spoke on "Cow Testing," and "Care and Handling of Milk and its Products on the Farm."

Lloydminster...	Monday, January	17, at 2 p.m.
Marwayne.....	Tuesday, "	18 "
Kitscoty....	Wednesday, "	19 "
Ranfurly	Thursday, "	20 "
Innisfree.....	Friday, "	21 "
Minburn.....	Saturday, "	22 "
Vermilion	Monday, "	24 "
Mannville	Tuesday, "	25 "
Chailey.....	Wednesday, "	26 "
Hortenburg.....	Thursday, "	27 "
Namoo	Friday, "	28 "
Millet.....	Saturday, "	29 "
Leduc.....	Monday, "	31 "
Conjuring Creek.....	Tuesday, February	1 "
Camrose.....	Wednesday, "	2, at 8 p.m.
Rosenthal	Thursday, "	3, at 2 p.m.
Falum.....	Friday, "	4 "

The following is a list of meetings addressed by Mr. W. F. Stephen, of Huntingdon, Quebec, who spoke on the following subjects: "The Building up of the Dairy Herd," "The Ideal Dairy Animal," "Feeding, Care, Management and Stabling," "Development of Milk Qualities," "Raising Dairy Calves," and Mr. Geo. W. Scott, Creamery Inspector, Innisfail, who spoke on the subjects indicated previously:

Wetaskiwin.....	Saturday, February	5, at 2 p.m.
Hardisty.....	Monday,	" 7, at 8 p.m.
Lougheed.....	Tuesday,	" 8, at 2 p.m.
Sedgewick.....	Wednesday,	" 9 "
Killam.....	Thursday,	" 10 "
Hastings Coulee.....	Friday,	" 11 "
Spring Lake.....	Saturday,	" 12 "
Daysland.....	Monday,	" 14 "
Bawlf.....	Tuesday,	" 15 "
Ferry Point.....	Wednesday,	" 16 "
Highland Park.....	Thursday,	" 17 "
Lewisville.....	Friday,	" 18 "
Bowden.....	Saturday,	" 19 "

The following is a list of meetings addressed by Mr. H. S. Pearson, of Red Deer, Alberta, who spoke on the following subjects: "Care of Milk," "Separating," "Ripening and Churning of Cream," "Working and Packing of Butter," "Testing of Milk and Cream," "Herd Census," and Mr. A. W. McIntyre, Newington, Ontario, who spoke on "Building up of the Dairy Herd," "The Ideal Dairy Animal," "Feeding, Care, Management and Stabling," "Development of Milk Qualities," and "Raising Dairy Calves":

Didsbury.....	Monday, January	17, at 2 p.m.
Neapolis.....	Tuesday,	" 18 "
Sunnyslope.....	Wednesday,	" 19 "
Three Hills.....	Thursday,	" 20 "
Trochu Valley.....	Friday,	" 21 "
Mayton.....	Saturday,	" 22 "
Red Deer.....	Monday,	" 24 "
Burnt Lake.....	Tuesday,	" 25 "
Eckville.....	Wednesday,	" 26 "
Evarts.....	Thursday,	" 27 "
Markerville.....	Friday,	" 28 "
Innisfail.....	Saturday,	" 29 "
Pine Lake.....	Monday,	" 31 "
Lake View.....	Tuesday, February	1 "
Trenville.....	Wednesday,	" 2 "
Gaetz Valley.....	Thursday,	" 3 "
Content.....	Friday,	" 4 "
Alix.....	Saturday,	" 5 "

The following is a list of meetings addressed by Mr. W. J. Tregillus, of Calgary, Alberta, who spoke on the following subjects: "Building up of the Dairy Herd," "The Ideal Dairy Animal," "Feeding, Care, Management and Stabling," "Development of Milk Qualities," "Raising Dairy Calves," and Mr. H. S. Pearson, of Red Deer, Alberta, who spoke on the subjects previously indicated:

Lamerton.....	Monday, February	7, at 2 p.m.
Valley City.....	Tuesday,	" 8 "
Earlville.....	Wednesday,	" 9 "
Morningside.....	Thursday,	" 10 "
Canyon.....	Friday,	" 11 "
Blackfalds.....	Saturday,	" 12 "
Ponoka.....	Monday,	" 14 "
Ferry Bank.....	Tuesday,	" 15 "
Bentley.....	Wednesday,	" 16 "
Rimby.....	Thursday,	" 17 "

The following is a list of meetings addressed by Mr. D. W. Warner, of Edmonton, who spoke on "Scientific Soil Culture," and Mr. A. W. McIntyre, Newington, Ontario, who addressed the meetings on "Hog Raising":

Lloydminster.....	Monday, February	7, at 2 p.m.
Marwayne.....	Tuesday, "	8 "
Kitscoty.....	Wednesday, "	9 "
Islay.....	Thursday, "	10 "
Mannville.....	Friday, "	11 "
Vermilion.....	Saturday, "	12 "
Innisfree.....	Monday, "	14 "
Tofield.....	Tuesday, "	15 "
Holden.....	Wednesday, "	16 "
Equity.....	Thursday, "	17 "
Viking.....	Friday, "	18 "
Irma.....	Saturday, "	19 "
Leduc.....	Monday, "	21 "
Millet.....	Tuesday, "	22 "
Hardisty.....	Wednesday, "	23, at 8 p.m.
Lougheed.....	Thursday, "	24, at 2 p.m.
Sedgewick.....	Friday, "	25 "
Killam.....	Monday, "	28 "
Hastings Coulee.....	Tuesday, March	1 "
Grainland.....	Wednesday, "	2 "
Merna.....	Thursday, "	3 "
Strome.....	Friday, "	4 "
Daysland.....	Saturday, "	5 "
Bawlf.....	Monday, "	7 "
Camrose.....	Tuesday, "	8 "

The following is a list of meetings addressed by Mr. A. Mitchell, of Indian Head, Sask., who spoke on the subject of "Forestry," and Mr. E. H. Malcolm, of Killam, Alberta, who addressed the meetings on "Destruction of Noxious Weeds" and "Soil Cultivation":

Langdon.....	Tuesday, February	8, at 2 p.m.
Strathmore.....	Wednesday, "	9 "
Gleichen.....	Thursday, "	10 "
Medicine Hat.....	Friday, "	11 "
Irvine.....	Saturday, "	12 "
Cardston.....	Monday, "	14 "
Magrath.....	Tuesday, "	15 "
Lethbridge.....	Wednesday, "	16 "
Macleod.....	Thursday, "	17 "
Pincher.....	Friday, "	18 "
Gratum.....	Saturday, "	19 "
Claresholm.....	Monday, "	21 "
Stavely.....	Tuesday, "	22 "
Nanton.....	Wednesday, "	23 "
Cayley.....	Thursday, "	24 "
High River.....	Friday, "	25 "
Okotoks.....	Saturday, "	26 "
Cochrane.....	Monday, "	28 "
Airdrie.....	Tuesday, March	1 "
Crossfield.....	Wednesday, "	2 "
Olds.....	Thursday and Friday, Mar. 3 and 4 (A. Mitchell)	

The following is a list of meetings addressed by Mr. A. W. Foley, Poultry Superintendent, Department of Agriculture, Edmonton, and Mr. E. J. Cook, Lethbridge, Alberta, who spoke on the following subjects: "Housing," "Feeding," "Hatching," "Rearing," "Fattening," "Killing," "Marketing," and other matters of interest connected with the poultry industry:

Stettler.....	Monday, January	17, at 8 p.m.
Content.....	Tuesday, "	18, at 2 p.m.
Lamerton.....	Wednesday, "	19 "
Alix.....	Thursday, "	20 "
Clive.....	Friday, "	21 "
Lacombe.....	Saturday, "	22 "
Ponoka.....	Monday, "	24 "
Blackfalds.....	Tuesday, "	25 "
Penhold.....	Wednesday, "	26 "

Bowden.....	Thursday, January 27 at 2 p.m.
Didsbury.....	Friday, " 28 "
Cochrane.....	Saturday, " 29 "

The following is a list of meetings addressed by Mr. E. J. Cook, Lethbridge, Alberta, on the subjects indicated previously, and Mr. S. S. Stansell, Edmonton, Alberta, who spoke on "Birds in their relation to Agriculture":

Calgary.....	Monday, January 31, at 8 p.m.
Langdon.....	Tuesday, February 1 "
Strathmore.....	Wednesday, " 2 "
Gleichen.....	Thursday, " 3 "
Medicine Hat.....	Friday, " 4 "
Irvine.....	Saturday, " 5 "
Taber.....	Monday, " 7 "
Magrath.....	Tuesday, " 8 "
Cardston.....	Wednesday, " 9 "
Lethbridge.....	Thursday, " 10 "
Macleod.....	Friday, " 11 "

Short Courses in Agriculture.

The short course work was very popular at the three points visited. The attendance was quite as large as expected and the interest kept up until the last. The third one of these courses was interfered with on account of the fact that it ran too late into the spring season. It would be much better if the work could be concluded by the first of March. It is also evident from our experience that it would be wiser to specialize in these courses instead of having a mixed programme each day. It would be better to deal with one subject until it is finished, thus permitting those interested in that particular subject to lose less time in securing the information they desire, allowing them to return home, if necessary, possibly to permit another member of the family to attend the course and take up some of the other subjects.

The courses which were of two weeks' duration were held at the following places:

Lethbridge.....	February 8th to February 19th.
Olds.....	February 21st to March 5th.
Vegreville.....	March 7th to March 19th.

The locating of the schools as above gave every farmer, and farmer's son who desired to do so, an opportunity of attending with very little outlay for travelling expenses.

Courses of instruction were given in live stock, dairying, agronomy and poultry raising.

Two cars of selected stock were used for demonstration purposes, and instruction given on the subjects of breeding, feeding, care and management of stock.

The following is a list of the live stock used and the names of the owners who so kindly loaned them to the department:

Clydesdales.

1 Stallion.....	Mr. McIntosh, DeWinton.
2 Stallions.....	John Turner, Calgary.
2 Mares.....	Bryce Wright, DeWinton.

Percherons.

1 Stallion.....	W. R. Winslow, Lacombe.
1 Stallion.....	J. Shirkey, Bentley.

Suffolks.

2 Stallions Geo. Jaques, Lamerton.

Hackneys.

1 Filly J. Turner, Calgary.
 1 Stallion C. A. Bell, Edmonton.
 2 Mares C. A. Bell, Edmonton.

Standard Breds.

1 Team H. Conn, Edmonton.

Shorthorns.

2 Cows F. C. Lyle, Strathcona.
 1 Bull F. C. Lyle, Strathcona.
 2 Cows Bryce Wright, DeWinton.
 1 Bull Bryce Wright, DeWinton.
 1 Cow P. M. Ballantine, Lacombe.
 1 Bull P. M. Ballantine, Lacombe.

Angus.

1 Cow W. C. McClure, Innisfail.
 1 Bull W. C. McClure, Innisfail.
 1 Cow W. Johnson, Lacombe.
 1 Bull T. Henderson, Lacombe.

Holsteins.

3 Cows W. J. Tregillus, Calgary.

Shropshire Sheep.

2 Rams J. Turner, Calgary.

Oxford Sheep.

2 Rams Bryce Wright, DeWinton.

Instruction in dairying covered the subject from the production of milk to the marketing of the finished product, with general farm dairy machinery in operation. Some little instruction was given in dairying at Lethbridge, but it was made a special feature at Olds and Vegreville.

Field work in grain growing with emphasis on soil cultivation received particular attention. Samples of grains, grasses and weeds were used for illustrative purposes.

Instruction in poultry raising covered all phases of the subject, with incubators and brooders in operation. Crate fattening and killing, packing for market, were specially demonstrated.

A large hall was secured at each point and all the lectures except those on live stock were given in this building. The live stock work was carried on in a large round tent fitted with stove and circus seats. For three evenings each week there were lectures on some subject of interest to a mixed audience. At most of these lectures a lantern was used. Mr. A. Mitchell, of the Forestry Branch, Indian Head, Sask., gave lectures at Lethbridge and Olds on forestry, using slides. Mr. S. S. Stansell, of Edmonton, gave addresses at the three courses on "Birds in their relation to Agriculture," using a number of slides.

The following gentlemen composed the staff:

Bryce Wright, DeWinton	G. H. Hutton, Lacombe.
Duncan Anderson, Ottawa.	W. H. Fairfield, Lethbridge.
John Guardhouse, Toronto.	W. C. McKillican, Dominion Seed Branch, Calgary.
A. W. Foley, Edmonton.	Miss Nora Trench, Calgary.
S. S. Stansell, Edmonton.	H. A. Craig, Edmonton.

The advertising of the institute work received special attention during the year. A large number of posters advertising the various meetings were sent to the following people:—Secretaries of agricultural societies, secretaries of boards of trade, local secretaries of united farmers' associations, secretaries of local improvement districts, hotel proprietors, postmasters, game guardians and station agents.

These men were asked to post in a conspicuous place.

A circular letter was also sent out to a mailing list of about five thousand outlining the work to be taken up at each set of meetings. In addition to this a folder was gotten out on which was set forth all the work of the season.

Advertising was carried in all the papers published in the province, this advertising appearing in, at least, two issues of each paper. It would be much more satisfactory if the advertising could be done by local associations. Those intimately in touch with local conditions are in a much better position to attend to matters of detail which necessarily attach to the work.

INSTITUTE STATEMENT.

	SOCIETY	Num- ber of Mem- bers	Num- ber of Meet- ings	Total Atten- dance	Member- ship Grant payable 1910
1	Cardston.....	133	2	63	\$133.00
2	Deserett.....	133	2	285	133.00
3	Didsbury.....	128	2	76	128.00
4	Innisfail.....	152	3	130	150.00
5	Lacombe.....	152	2	39	150.00
6	Lethbridge.....	167	2	150	150.00
7	Macleod.....	179	2	12	150.00
8	Medicine Hat.....	171	2	80	150.00
9	Olds.....	150	2	90	150.00
10	Pincher Creek.....	175	2	65	150.00
11	Ponoka.....	139	2	42	139.00
12	Raymond.....	152	2	81	150.00
13	Red Deer.....	...	...	...	...
14	Okotoks.....	154	2	58	150.00
15	Vermilion Valley and Beaver Lake.....	130	2	400	130.00
16	Wetaskiwin.....	94	2	80	94.00
17	Leduc.....	105	2	65	105.00
18	Nanton.....	39	1	40	None.
19	Vermilion.....	91	2	63	91.00
20	High River.....	274	2	54	150.00
21	Priddis and Millarville.....	63	2	36	63.00
22	Viking and Birch Lake Districts.....	78	2	97	78.00
23	St. Albert and Morinville.....	75	2	150	75.00
24	Mannville.....	...	...	...	...
25	Stettler.....	137	...	100	137.00
26	Daysland.....	134	2	100	134.00
27	Clareholm.....	120	2	125	120.00
28	Milnerton.....	136	2	43	136.00
29	Irvine.....	51	3	75	51.00
30	Taber.....	123	2	137	123.00
31	Innisfree.....	64	2	49	64.00
32	Sedgewick.....	117	2	144	117.00
33	Alix.....	82	2	80	82.00
34	Lloydminster.....	161	2	60	150.00
35	Camrose.....	250	2	70	150.00
36	Gleichen.....	133	2	22	133.00
37	Three Hills.....	126	2	48	126.00
38	Irma.....	61	2	74	61.00
39	Crossfield.....	140	2	105	140.00
40	Airdrie.....	...	...	...	...
41	Bowden.....	81	2	185	81.00
43	Wabamun.....	93	2	36	93.00
44	Fallis and Rexboro' District.....	73	2	56	73.00
45	Holden.....	114	2	53	114.00
46	Cochrane and District.....	220	2	59	150.00
47	Stavely.....	99	2	88	99.00
48	Tofield.....	115	2	70	115.00
49	Strome-Killam.....	114	2	95	114.00
50	Trochu.....	106	...	...	None.
51	Fort Saskatchewan.....	129	2	35	129.00
52	Granum.....	55	...	...	None.
53	Langdon and Bow River.....	60	2	110	60.00
54	Grand Prairie.....	...	...	...	...
55	Castor.....	207	2	81	150.00
56	Kitscoty.....	117	2	36	117.00
57	Stony Plain.....	111	2	81	111.00
58	Lesser Slave Lake.....	56	2	55	56.00
59	Rawdonville.....	58	2	375	58.00
60	Entwistle and Pembina Valley.....	81	2	22	81.00

Excursions.

Excursions were run to the Experimental Farm at Lacombe on July 29th. Special trains were arranged to run—

From Strathcona to Lacombe.
From Calgary to Lacombe.
From Stettler to Lacombe.

Also special rates on the Wetaskiwin branch and connections with the Strathcona train.

The advertising was done in very much the same manner as was done with the institute work. The attendance reached about one thousand, being nearly double that of last year. After the visitors were shown around the farm by guides the following programme was carried out:

Chairman's address.

Address by Hon. Duncan Marshall, Minister of Agriculture, Alberta.

Address by W. F. Puffer, M.L.A., Lacombe.

Address by E. J. Fream, Secretary U.F.A.

Address by F. Mitchener, M.L.A., Red Deer.

Address by W. F. Stevens, Live Stock Commissioner.

Address by H. A. Craig, Superintendent Fairs and Institutes.

II.—FAIRS.

During the year eighteen new societies were organized as follows:

Rexboro' and District, Holden, Cochrane and District, Stavely, Tofield, Strome-Killam, Trochu, Fort Saskatchewan, Mid-Pembina, Granum, Langdon, Grande Prairie, Castor, Kitscoty, Stony Plain, Lesser Slave Lake, Rawdonville, and The Entwistle and Mid-Pembina Valley.

It will be noted that a number of these are in the Pembina, Athabasca and Peace River electoral districts.

The following is a complete list of the agricultural societies and exhibition associations in the province with their secretaries and their addresses:

AGRICULTURAL SOCIETIES

NAME	SECRETARY	ADDRESS
Cardston.....	S. M. Woolf.....	Cardston.
Deserett (Magrath).....	Benj. Matkin.....	Magrath.
Didsbury.....	H. B. Atkins.....	Didsbury.
Innisfail.....	E. J. Fream.....	Innisfail.
Lacombe.....	Jas. Gourlay.....	Lacombe.
Lethbridge.....	J. McNicol.....	Lethbridge.
Macleod.....	R. H. Hilliard.....	Macleod.
Medicine Hat.....	W. N. Adsit.....	Medicine Hat.
Olds.....	R. Bowman Campbell.....	Olds.
Pincher Creek.....	J. H. Harwood.....	Pincher Creek.
Ponoka.....	T. W. Hutchinson.....	Ponoka.
Raymond.....	S. F. Kimball.....	Raymond.
Okotoks.....	E. A. Hayes.....	Okotoks.
Vermilion Valley and Beaver Lake ..	Frank Wilson.....	Vegreville.
Wetaskiwin.....	C. D. Enman.....	Wetaskiwin.
Leduc.....	R. M. Watt.....	Leduc.
Nanton.....	Wm. Robertson.....	Nanton.
Vermilion.....	Roy C. Jackson.....	Vermilion.
High River.....	Harry Nelson.....	High River.
Priddis and Millarville.....	R. Knights.....	Millarville.
Viking and Birch Lake District.....	Claude S. Councilman.....	Harland.

AGRICULTURAL SOCIETIES.—*Continued.*

NAME	SECRETARY	ADDRESS
St. Albert (Morinville).....	O. St. Germain.....	Morinville.
Mannville.....	R. B. Manning.....	Mannville.
Stettler.....	John O. Young.....	Stettler.
Daysland.....	A. A. P. McDowell.....	Daysland.
Claresholm.....	J. A. Watt.....	Claresholm.
Milnerton.....	Ernest W. Meers.....	Knee Kill Valley.
Irvine.....	L. R. Harris.....	Irvine (Box 47).
Taber.....	Hans Hansen.....	Taber.
Innisfree.....	J. J. Montgomery.....	Innisfree.
Sedgewick.....	John Burn.....	Sedgewick.
Alix.....	C. H. Darlow.....	Alix.
Lloydminster.....	H. Huxley.....	Lloydminster.
Camrose.....	F. L. Farley.....	Camrose.
Gleichen.....	B. S. Corey.....	Gleichen.
Three Hills.....	B. L. LaRoy.....	Royton.
Irma.....	Chas. Swailes.....	Irma.
Crossfield.....	R. L. Boyle.....	Crossfield.
Airdrie.....	E. C. Hallman.....	Airdrie.
Bowden.....	H. E. Shenfield.....	Bowden.
Wabamun.....	C. C. Laight.....	Wabamun.
Rexboro.....	Geo. Merryweather.....	Rexboro'.
Holden.....	W. E. Hayes.....	Holden.
Cochrane.....	J. E. Laird.....	Cochrane.
Stavely.....	O. C. Arnestad.....	Stavely.
Tofield.....	J. W. Morton.....	Tofield.
Strome and Killam.....	Chas. Lyall.....	Strome.
Trochu.....	L. C. Eckenfelder.....	Trochu.
Granum.....	J. B. Allison.....	Granum.
Langdon.....	Wm. Cassels.....	Langdon.
Grande Prairie.....	W. A. Rae.....	Beaver Lodge.
Castor.....	T. J. Turner.....	Castor.
Kitscoty.....	C. E. McPhee.....	Kitscoty.
Stony Plain.....	T. P. Lindley.....	Stony Plain.
Lesser Slave Lake.....	Geo. E. Martin.....	Grouard.
Rawdonville.....	A. B. Claypool.....	Rawdonville.
Mid-Pembina.....	F. L. Fenner.....	Heaton Moor.
The Entwistle and Pembina Valley...	Alfred Waite.....	Entwistle.

EXHIBITION ASSOCIATIONS

Red Deer.....	R. B. Welliver.....	Red Deer.
Fort Saskatchewan.....	J. B. Adamson.....	Fort Saskatchewan.
Inter-Western Pacific.....	E. L. Richardson.....	Calgary
Edmonton Industrial.....	A. G. Harrison.....	Edmonton.

Official Judges.

As in past years the practice of supplying official judges to pass on the awards at the various fairs and exhibitions throughout the province was continued. The following is a complete statement showing the dates of the fairs and the official judges supplied:

FAIR	DATE	JUDGES FOR HORSES	JUDGES FOR CATTLE, SHEEP AND SWINE
Calgary...	July 1 to 7.....	A. Ness, Howick, Que. (Heavy). A. Laidlaw, Spokane, Wash. (Light).	G. H. Hutton, Lacombe. (Cattle and Swine). J. McCaig, Edmonton (Sheep).
Okotoks.....	July 12, 13.....	A. Ness, Howick, Que.....	P. M. Bredt, Regina, Sask.
Innisfail.....	July 14, 15.....	Neil Smith, Brampton, Ont..	A. W. McIntyre, Newington, [Ont.
Macleod.....	Aug. 3, 4, 5...	"	"
Lethbridge...	Aug. 9, 10, 11..	"	"
Clareholm...	Aug. 15, 16.....	"	"
Medicine Hat..	Aug. 17, 18, 19..	(Heavy). Dr. G. A. Routledge, Lambeth, Ont (Light).	
Edmonton.....	Aug. 23-24-25-26.	Neil Smith, Brampton, Ont.. (Heavy). Dr. G. A. Routledge, Lambeth, Ont. (Light).	Geo. Hunter, Edmonton (Cattle and Sheep). A. W. McIntyre, Newington, Ont. (Swine).
Raymond.....	Sept. 19-20-21	A. W. McIntyre, Newington, [Ont.	W. R. Winslow, Lacombe.
Magrath.....	Sept. 22, 23...	"	"
Pincher Creek...	Sept. 27.....	"	"
Taber.....	Sept. 28.....	"	"
Cardston.....	Sept. 29, 30...	"	"
Lloydminster.	Oct. 4.....	H. A. Craig, Edmonton.....	T. H. Tinney, Medicine Hat.
Vermilion...	Oct. 5.....	A. W. McIntyre, Newington, [Ont.	"
Innisfree.....	Oct. 6, 7.....	"	"
Mannville.....	Oct. 11.....	"	"
Vegreville.....	Sept. 30.....	Dr. D. McKercher, Olds...	Geo. Hunter, Edmonton
St. Albert.....	Sept. 16.....	T. Rawlinson, Wimborne...	Jas. Hunter, Innisfree.
Daysland.....	Sept. 20.....	"	"
Sedgewick.....	Sept. 21.....	"	"
Camrose.....	Sept. 22, 23...	"	"
Wetaskiwin.....	Sept. 27, 28...	"	"
Bowden.....	Sept. 28.....	"	"
Lacombe.....	Sept. 29, 30...	"	"
Stettler.....	Oct. 5, 6.....	"	"
Alx.....	Oct. 7.....	"	"
Milnerton.....	Oct. 11.....	Dr. D. McKercher, Olds...	W. H. Hammer, Olds.
Leduc.....	Sept. 13.....	Neil Smith, Brampton, Ont..	A. W. McIntyre, Newington,
Olds.....	Sept. 14, 15...	"	W. S. Jacobs, Calgary. [Ont.
Three Hills...	Sept. 20.....	"	"
Wabamun.....	Oct. 1.....	Dr. D. McKercher, Olds...	T. H. Tinney, Medicine Hat.
Rexboro.....	Oct. 27, 28.....	J. A. McPherson, Stony Plain	J. A. McPherson, Stony Plain (Cattle). P. Gunn, Lac St. Anne (Sheep and Swine).
Holden.....	Oct. 29.....	Neil Smith, Brampton, Ont..	W. S. Jacobs, Calgary.
Viking.....	Oct. 30.....	"	"
Ft. Saskatchewan.	Oct. 4.....	"	"
Ponoka.....	Oct. 5, 6.....	"	"
Didsbury.....	Oct. 6, 7.....	"	"
Gleichen.....	Oct. 11, 12.....	"	"
Priddis.....	Oct. 12.....	"	"
High River...	Oct. 13, 14.....	"	"
Tofield.....	Sept. 28.....	"	"
Crossfield.....	June 22.....	T. Rawlinson, Wimborne...	W. R. Winslow, Lacombe.
Cochrane & Dist..	Sept. 16.....	Neil Smith, Brampton, Ont..	W. S. Jacobs, Calgary.
Strome-Killam...	Sept. 23.....	T. Rawlinson, Wimborne...	A. W. McIntyre, Newington,
Trochu.....	Sept. 21.....	Neil Smith, Brampton, Ont..	W. S. Jacobs, Calgary [Ont.
Irma.....	Oct. 4.....	"	"
Kitscoty.....	Oct. 7.....	T. H. Tinney, Medicine Hat..	H. W. Scott, Strathcona.
Castor.....	Sept. 16.....	A. W. McIntyre, Newington, Ont.	W. R. Winslow, Lacombe.

EXHIBITION STATEMENT, 1910.—Continued.

SOCIETY.	Date of Exhibition	No. of Entries	Amount paid in prizes for sports	Amount paid in prizes for field com- petition	Amount paid in prizes for stallion show	Amount paid in prizes for seed grain show	Amount paid in prizes for poultry show	Musical contest	Amount paid in other prizes	Exhibition grant payable 1910	Fine
39 Crossfield...	June 22...	131	.....	.....	.....	.....	.....	.....	\$502.00	\$201.33	.....
40 Airrie.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
41 Bowden.....	Sept. 28...	525	20.50	.....	.....	.....	.....	.....	390.20	400.49	.....
43 Wabamun...	Oct. 1.....	385	140.50	\$80.00	.....	\$87.00	.....	.....	510.50	340.33	.....
44 Rexboro'...	Sept. 1.....	241	35.00	.....	.....	.....	.....	.....	239.50	173.00	.....
45 Holden.....	Sept. 29...	102	5.00	.....	.....	.....	.....	.....	209.50	.....	10.00
46 Cochrane...	Sept. 16...	694	240.75	.....	.....	.....	.....	.....	732.70	488.46	.....
47 Stavely (No exhibition held).	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
48 Tofield.....	Sept. 28...	236	.....	.....	.....	31.00	.....	.....	261.50	205.33	10.00
49 Strome-Killam.	Sept. 28...	649	.....	.....	.....	.....	.....	.....	422.50	281.66	.....
50 Trochu.....	Sept. 21...	226	.....	.....	.....	.....	.....	.....	188.25	.....	.....
51 Fort Saskatchewan.	Sept. 23...	424	230.00	.....	.....	.....	.....	.....	623.75	417.17	.....
52 Granum (No exhibition held).	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
53 Grande Prairie (No exhibition held).	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
54 Castor.....	Sept. 15, 16...	778	376.50	.....	.....	.....	.....	.....	822.75	548.50	20.00
56 Kitscoty.....	Oct. 6.....	294	.....	.....	.....	.....	.....	.....	317.75	211.83	.....
57 Stony Plain...	Oct. 11...	510	20.00	.....	.....	70.00	.....	.....	389.00	329.33	.....
58 Lesser Slave Lake.	Oct. 21...	266	.....	.....	.....	.....	.....	.....	253.95	169.30	.....
59 Rawdonville (No exhibition held)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
EXHIBITION ASSOCIATIONS.											
99 Inter-Western Pacific.	June 30 to July 7	3,732	7,180.84	.....	.....	.....	.....	.....	14,898.25	3,000.00	.....
100 Edmonton Industrial.	Aug. 23 to 26...	2,080	6,381.15	.....	.....	.....	.....	.....	7,990.00	3,000.00	.....

EXHIBITION FINANCIAL STATEMENT, 1910.

	SOCIETY.	Balance on hand from 1909	Mis- cellaneous Receipts	Government Grant paid in 1910	Total Receipts	Total Expenditure	Balance on hand	Assets	Liabilities
1	Cardston.	\$177.99	\$3,166.18	\$856.00	\$4,022.18	\$4,000.68	\$21.50	\$3,042.50	\$3,159.85
2	Magrath.	..	5,418.45	1,241.00	6,659.45	6,622.62	36.83	5,036.83	4,000.00
3	Didbury.	138.58	612.95	710.67	1,462.20	1,358.49	103.71	103.71	..
4	Innisfail.	..	4,278.75	1,544.00	5,823.31	5,819.56	3.75	6,176.15	3,250.60
5	Lacombe.	..	2,098.40	923.83	3,022.23	2,881.02	141.21	11,488.75	2,793.75
6	Lethbridge.	7.31	11,791.86	2,040.00	13,839.17	13,839.17	..	..	92.16
7	Macleod.	19.20	5,345.91	1,578.00	6,985.31	6,750.76	234.55	2,309.71	1,737.20
8	Medicine Hat.	..	23,466.18	873.33	24,339.51	24,584.33	..	22,418.91	12,244.82
9	Olds.	..	872.97	534.67	1,407.64	1,377.35	30.29	3,530.29	1,149.35
10	Pincher Creek.	6.10	2,708.10	414.80	3,129.00	3,124.91	4.09	5,762.26	2,247.32
11	Ponoka.	166.76	2,317.45	1,099.67	3,583.88	3,570.73	13.15	913.15	1,180.00
12	Raymond.	..	4,234.26	985.17	5,219.43	5,219.43	..	2,242.17	2,686.68
13	Red Deer.	..	..	..	..	..	..	..	..
14	Okotoks.	2.98	4,477.01	679.83	5,159.82	5,113.25	46.57	1,746.57	1,075.00
15	Vermilion Valley.	9.55	1,943.50	760.33	2,713.38	2,525.29	188.09	4,241.09	2,960.82
16	Wetaskiwin.	..	2,610.61	496.83	3,076.78	3,107.44	..	2,045.33	1,030.66
17	Leduc.	28.07	1,848.45	802.67	2,654.19	2,679.19	..	925.00	925.00
18	Nanton.	108.04	45.30	429.63	582.97	104.15	478.82	478.82	..
19	Vermilion.	1.00	1,151.60	453.87	1,606.47	1,597.03	9.44	1,056.18	636.58
20	High River.	42.74	1,775.75	515.86	2,334.35	2,885.73	..	823.00	582.88
21	Piddis and Millarville.	26.06	254.35	299.00	579.41	575.64	3.77	3.77	14.00
22	Viking and Birch Lake.	..	364.20	387.67	751.87	1,093.22	..	..	341.35
23	St. Albert and Morinville.	..	703.20	382.00	1,085.20	1,079.84	5.36	17.36	100.00
24	Mannville.	..	..	..	..	..	..	..	..
25	Stettler.	..	1,204.86	420.33	1,625.19	2,217.66	..	5,050.00	1,644.85
26	Daysland.	..	1,809.50	244.00	2,053.50	2,140.59	..	1,400.00	1,287.09
27	Clareholm.	..	1,075.38	550.00	1,625.38	1,684.95	..	..	509.57
28	Miherton.	31.07	1,143.65	451.33	1,626.05	1,604.85	21.20	426.20	575.00
29	Irvine.	55.02	100.00	43.00	155.02	161.20	..	247.00	6.18
30	Taber.	64.78	1,282.10	481.67	1,828.55	1,569.05	259.50	319.50	591.50

31 Innisfree.....	69.15	616.25	256.30	872.55	1,012.30	112.58	366.20	492.75
32 Sedgewick.....	.....	2,759.65	668.33	3,497.13	3,384.55	.....	3,789.23	2,182.00
33 Alix.....	.....	1,376.55	402.50	1,779.05	1,811.70	.....	769.75	713.96
34 Lloydminster.....	.....	1,798.85	1,164.33	2,963.18	3,073.18	.....	1.90	1,225.00
35 Camrose.....	12.67	1,492.75	412.50	1,917.92	1,444.05	473.87	473.87	800.00
36 Gleichen.....	100.18	4,348.35	499.67	4,948.20	4,672.86	275.34	5,275.34	1,165.31
37 Three Hills.....	15.95	470.70	457.10	943.75	937.10	6.65	15.65	150.00
38 Irma.....	105.85	522.70	60.00	688.55	783.41	.....	3,000.00	354.86
39 Crossfield.....	102.65	776.80	.....	879.45	879.45	.....	.....	2,287.50
40 Airdrie.....	.....	.....	.....	.....	.....	.....	.....	.....
41 Bowden.....	10.05	845.90	321.83	1,177.78	1,194.24	.....	24.00	298.77
43 Wabamun.....	14.50	956.75	72.00	1,043.25	1,023.30	19.95	515.95	675.00
44 Fallis and Rexboro.....	27.00	282.30	76.00	385.30	391.35	.....	.....	6.05
45 Holden.....	.....	298.35	.....	298.35	208.66	89.69	89.69	605.95
46 Cochrane and District.....	.....	1,544.55	.....	1,544.55	1,535.95	8.60	236.60	.....
47 Stavely.....	.....	103.00	.....	103.00	27.50	75.50	75.50	.....
48 Tofield.....	.....	785.75	.....	785.75	812.30	.....	4,830.00	1,446.55
49 Strome-Killam.....	.....	1,248.15	.....	748.15	1,248.15	.....	3,000.00	2,287.50
50 Trochu.....	.....	413.55	.....	413.55	371.26	42.29	48.04	160.95
51 Fort Saskatchewan.....	.....	1,081.80	.....	1,081.80	1,042.90	38.90	38.90	612.00
52 Granum.....	.....	60.00	.....	60.00	11.50	48.50	48.50	.....
53 Langdon and Bow River.....	.....	.....	.....	.....	.....	.....	.....	.....
54 Grande Prairie.....	.....	1,829.45	.....	1,829.45	2,494.20	.....	1,030.55	1,634.75
55 Castor.....	.....	457.00	.....	457.00	423.35	33.65	33.65	200.00
56 Kitscoty.....	.....	615.30	.....	615.30	615.30	.....	.....	77.45
57 Stony Plain.....	.....	368.50	.....	368.50	258.95	109.55	109.55	.....
58 Lesser Slave Lake.....	.....	126.00	.....	126.00	19.05	106.95	106.95	.....
59 Rawdonville.....	.....	250.90	.....	250.90	245.55	5.35	5.35	.....
60 Entwistle and Pembina.....	.....	.....	.....	.....	.....	.....	.....	.....
99 Inter-Western Pacific.....	12,002.89	47,596.26	11,000.00	70,599.15	70,530.04	12,169.42	19,319.42	801.60
100 Edmonton Industrial.....	.....	36,978.65	3,000.00	39,978.65	49,978.55	.....	2,110.98	10,900.35

EXHIBITION ASSOCIATIONS

III.—POULTRY SHOWS.

Poultry shows have been held at the following places:

Magrath.....	January 20.
Pincher Creek.....	March 2.
Taber.....	January 21.
Calgary.....	December 13, 14 and 15.
Lethbridge.....	January 26, 27 and 28.
Edmonton.....	December 14, 15, 16 and 17 (1909).

IV.—FIELD GRAIN COMPETITIONS.

The following societies held field grain competitions in 1910: Innisfail, Lacombe, Lethbridge, Macleod, Medicine Hat, Raymond, Vermilion Valley, Leduc, Sedgewick, Lloydminster and Bowden.

V.—SEED FAIRS.

The following societies held seed grain fairs:

Cardston.....	November 22.
Magrath.....	January 20.
Didsbury.....	January 29.
Lacombe.....	January 26.
Lethbridge.....	January 22.
Macleod.....	August 3, 4 and 5.
Medicine Hat.....	March 3 and December 1.
Olds.....	January 28.
Pincher Creek.....	March 2.
Raymond.....	November 24.
Okotoks.....	January 27.
Vermilion Valley.....	March 9.
Leduc.....	December 21.
Nanton.....	January 26.
Vermilion.....	November 24.
Viking.....	January 15.
Daysland.....	January 24.
Milnerton.....	November 24.
Irvine.....	January 20.
Taber.....	January 21.
Innisfree.....	November 25.
Sedgewick.....	January 21.
Lloydminster.....	December 1 and August 11.
Camrose.....	January 20.
Gleichen.....	December 2.
Three Hills.....	December 7.
Irma.....	January 22.
Bowden.....	January 27.
Tofield.....	December 2.
Stony Plain.....	December 3.

VI.—STALLION SHOWS.

Spring stallion shows have been held at Medicine Hat, Okotoks, Vegreville and Calgary. The judges were:

Professor W. L. Carlyle, Moscow, Idaho.
W. A. Dryden, Brooklin, Ont.
D. C. Robertson, Edmonton.

A significant feature about the fairs of the province in the past year has been the rapid advancement of those fairs held in the cities and larger towns. Two very excellent exhibitions were held at Calgary and Edmonton, either worthy of cities in the older provinces. The Edmonton Association has secured new grounds and has erected an up-to-date set of buildings. Renewed interest was

shown in the Medicine Hat, Lethbridge and Macleod fairs. All of these places have secured new grounds of late and the prospect for good fairs at these points looks very bright. No fair can succeed well without the co-operation and assistance of the town. It is very noticeable in the past season that the townspeople are realizing more fully the advantages to be gained from an exhibition, and it is encouraging to see the evidence of this in the very liberal financial aid given by the towns to a number of the agricultural societies.

Better system prevails in the management of the exhibitions from year to year. The information given out by the Fairs Association has been a very effective force in directing the efforts of the agricultural societies.

H. A. CRAIG,
Superintendent of Fairs and Institutes.

8.—REPORT OF THE LIVE STOCK COMMISSIONER.

SIR,—Besides the usual routine work of the live stock branch, the following additional work was undertaken during the year 1910.

Explaining to the swine growers the nature and amount of assistance which the Government had agreed to grant toward the establishment of a farmers' co-operative pork packing plant, and the terms upon which the same would be made, also soliciting the necessary pledges of patronage thereto.

Holding meetings in outlying districts to discuss live stock questions peculiar to each.

Exploring valleys in the Rocky Mountains, south of the main line of the Canadian Pacific Railway, with a view to ascertaining if conditions there were such as to justify a request to the Dominion Government that certain of them be opened as a summer pasture for sheep.

Gathering information concerning progress made toward improvement in the transportation of live stock.

Inquiring into the status of the swine industry and difficulties connected therewith.

CO-OPERATIVE PORK PACKING PLANT.

As regards the work in the interest of a farmers' co-operative pork packing plant, I beg to report that for this work the assistance of Mr. Henry Jamieson of Red Deer, a prominent member of the United Farmers of Alberta; Mr. D. W. Warner of Edmonton, a director, and Mr. E. J. Fream of Innisfail, the secretary of the above organization, was secured.

As the members of the United Farmers of Alberta were the leaders in the movement to secure a co-operative plant, the local unions of this organization throughout the swine growing districts were made use of as a means of getting in touch with the swine growers who were most interested in the subject and who would be most likely to support the undertaking.

Circular letters were also sent to the secretaries of the local unions of the organization outside the swine growing districts also to the secretaries of agricultural societies and creamery associations at points where there were no unions of the farmers' association, advising them that if their members were interested in the matter and signified a desire to have it explained, a speaker would be sent to explain it. In all one hundred and sixteen meetings were held and a patronage of twelve thousand seven hundred and sixty-four hogs secured.

SPECIAL MEETINGS IN NEW SETTLEMENTS.

With a view to acquainting myself with live stock conditions in the settlements to the north and west of Edmonton, and to ascertaining the attitude of settlers in the newer districts toward institute meetings, a meeting was arranged for at each of the following places: Riviere Qui Barre, Lac la Nonne, Belvedere, Paddle River, Mosside, Heaton Moor, Manola and Edison.

I was accompanied on this trip by Mr. Geo. Harcourt, Deputy Minister of Agriculture, who spoke on the subject of soil cultivation

with a view to conserving moisture and eradication of weeds; by Mr. A. W. Foley, Poultry Superintendent, who spoke on up-to-date methods in poultry raising, while I spoke on dairying and successful swine growing. The average attendance at these meetings was forty-two, the largest attendance at any one meeting was seventy-five, the lowest twenty-one. The interest manifested was, I think, all that could be desired.

IMPROVEMENT OF WOOL AND MUTTON INDUSTRY.

Complaints having been received from the wool growers of Alberta that unless additional pastures could be obtained, wool growing as a ranching proposition would be a thing of the past in Alberta, and it being represented that there were several valleys in the Rocky Mountains which were admirably adapted to sheep grazing during the summer months; that some of them were practically unstocked with horses or cattle and, acting under instructions from the Minister of Agriculture, an arrangement was entered into with the Dominion Government and the Wool Growers' Association for a joint inspection of those valleys south of the main line of the Canadian Pacific Railway, which were reported to be unstocked.

The party started from Pincher Creek on August 6th and examined the valleys of Pincher Creek, the south branch of Yellow Creek, the district about Beaver Lake and Table Mountain, Pass Creek, the south branch of the South Fork River, Caudon Creek, Daisy Creek, Race Horse Creek, the north-west branch of the Livingston River, up to the falls, and the valley of the Livingston up to Township 12, Range 4, west of the Fifth Meridian.

The first two valleys we found fairly well stocked with cattle and horses. In Pass Creek Valley, there was no live stock of any kind at the time of our visit, while on every hand there was from two to three years' growth of grass decaying on the ground. The district about Beaver Lake and Table Mountain we found was stocked but slightly; there was no stock in the valley of the south branch of the South Fork River. The valleys of the Caudon and Daisy Creeks were heavily wooded but recently burnt over. The valleys of Race Horse Creek and the north-west branch of the Livingston River contain a fair amount of open country, but it is entirely unstocked. The valley of the Livingston, though an ideal one for stock grazing, contained only twenty-five head of horses.

MARKETING LIVE STOCK.

For several years there have been numerous complaints regarding inadequate facilities for shipping live stock. These complaints came chiefly from districts devoted to mixed farming or small ranching. Acting in conjunction with the Western Live Stock Shippers' Association, these grievances were taken up with the Railway Commission in February, 1909, and an order was issued providing for an inspection of all the stock yards in Alberta by the Assistant Operating Railway Commissioner, the General Live Stock agent of the Canadian Pacific Railway and myself. Upon the conclusion of this inspection the Operating Assistant Railway Commissioner indicated the points at which new yards were required, those at which old ones should be remodelled or repaired and those at which feeding racks and watering troughs should be installed. It was also recommended that a well with suitable pump should be provided at points where water could be obtained within a distance of thirty feet from the surface. At other

points special arrangements would have to be made according to the needs of each particular place and conditions as to water supply. These recommendations were agreed to by the officials of both the Canadian Pacific and the Canadian Northern Railway companies and the assurance given that the work would be proceeded with at once.

As regards the Canadian Pacific Railway and its branches there has been little to criticize in the amount and character of the work done in 1910 toward stock yard improvement. New yards have been built at Castor, Stettler, Erskine, Clive, Tees, Granum, Acme and Irricana; additions and improvements have been made to the yards at Bittern Lake, Olds, Ponoka and Claresholm and arrangements have been made for a new five-pen yard at Ponoka and for watering facilities at Red Deer, Penhold, Innisfail and Strathcona.

As regards the yards along the line of the Canadian Northern, conditions at the time the inspection was made were not good. Nearly all the yards were faulty in design and lacking in equipment and there has not been the effort displayed to provide the improvements recommended that was hoped for. I may add that I have begun a personal examination of the yards along this line with a view to informing myself as to that part of the work which still remains undone for the purpose of submitting a report of the same to the Railway Commission in support of a request for an order specifying the time within which the recommendations of the commissioner shall be completed.

The difficulties connected with the moving of live stock are largely due:

- 1st. To the inadequate supply of stock cars and the consequent necessity of substituting box cars therefor;

- 2nd. To the dearth of law and specific regulations governing the receiving, moving and unloading of live stock;

- 3rd. To the reluctance of shippers to make use of such laws as have already been enacted in their interest; and

- 4th. To the indifference of many station agents and train men to the comfort of live stock and the complaints of shippers and their requests for information regarding the arrival and departure of stock trains.

As regards the shipping of live stock in box cars, I am convinced from personal interviews with shippers and from my own observation, that fully one-third of the stock coming off the Wetaskiwin branch of the Canadian Pacific Railway during the past year have come out in box cars. The same is true though probably in a less degree of the Lacombe branch, and one instance has been brought to my notice of four hundred and fifty head of cattle billed for export, going off this line in box cars.

Additional laws and regulations governing the transportation of live stock are needed specifying the time within which stock cars must be spotted for unloading after arrival at point of destination or a feeding point; and requiring transportation companies to provide double-decked cars for the transportation of hogs and sheep.

I am free to admit that the officials of the railway companies, particularly the Live Stock Agent of the Canadian Pacific Railway, have always been very prompt to remedy individual grievances and particular requests made by myself; the difficulty lies in the fact that this readiness to oblige and give prompt service is displayed by too few of the men with whom the shipper, particularly the small shipper, has to deal.

WEEKLY STOCK TRAIN ON C. & E.

Early in 1909 I co-operated with the secretary of the United Farmers of Alberta in an effort to secure a weekly stock train on the Calgary and Edmonton Railway on which stockmen might ship to Edmonton without the delays which formerly occurred at junctions and divisional points. The advantages which it was hoped would result from this arrangement have not been realized. I have not yet determined where the fault lies. The railway officials complain that the shippers pay no attention to the arrangement but insist on shipping on whatever day suits them. The shippers on the other hand complain that the day selected as live stock day was also selected as the day for gathering up the weekly output of the Government creameries, and that the delays incident to collecting the butter makes this particular day one of the worst on which to ship live stock. It is also alleged that the packers do not look with favour on the idea of having the bulk of their supplies come in on a single day but prefer that receipts be equally distributed throughout the week.

I consider that a live stock market at both Edmonton and Calgary with two market days per week at each place would do much toward remedying the difficulties complained of as it would facilitate the matter of securing stock trains carrying a sufficient tonnage to warrant giving them a special run, besides giving to the shippers the benefit of more competition among buyers. Such a market has already been started in Calgary and in the opinion of those with whom I have conversed regarding it, the results have been favourable to both shipper and producer. I purpose giving this question particular attention and have interviewed a number of stockmen and requested them to make suggestions on the subject.

FEEDING AND WATERING EN ROUTE.

The matter of getting cattle, billed for export, fed and watered at proper intervals is one with which it is difficult to deal. The Criminal Code specifies thirty-six hours as the longest period of time in which live stock may be kept in cars without rest, while the shipper may demand rest for his animals every twenty-eight hours. But it is only under the most favourable conditions that trains can cover the distance between feeding points, as at present established, within the time specified, and there are no intermediate points at which any considerable number of cattle can be fed and watered. The result is that a very large percentage of Alberta cattle suffer a heavy shrinkage by being kept on board cars for forty hours without feed or water and there are numerous instances where forty-eight hours have elapsed between feeds. Well-matured and well-fed range cattle can endure these hardships with no indications of distress, but with farm-bred cattle which are usually marketed as three-year-olds or younger and with cattle finished in the feed lots, the case is different. As these last two classes are each year increasing in number while our range herds are getting fewer and smaller it is becoming more and more difficult for buyers to gather up a full train load of cattle to ship from one point in the same day and thus secure a "stock" run, and it naturally follows the animals which are least able to endure the hardships incident to being included in a train of dead freight are the ones most likely to be subjected to them. It is evident, therefore, that the system of marketing live stock which was suitable under old conditions will have to be improved before stock growing on the farms and small ranches of Alberta can assume the proportions it might otherwise do.

DIFFICULTIES AT MOOSE JAW.

Moose Jaw has long been a centre from which many complaints from stock shippers have come. In his recommendations regarding the stock yards at this place, the Operating Assistant Railway Commissioner in his general report dated August 3rd, 1909, says: "This yard is in elegant condition. Absolutely nothing required here except more attention be paid to cleaning out the pens."

Owing to the increased number of cattle going through these yards since the above report was made, it has been evident that this yard was unable to handle properly, humanely and without loss to the shippers the number of cattle going through them. Upon my return from Moose Jaw recently, I drew the attention of the General Live Stock Agent of the Canadian Pacific Railway to this matter and was advised by him that he had already arranged to have an additional spur put in, in order that cattle might be unloaded promptly on arrival although another train was being loaded.

As the water supply for these yards is brought in in overhead pipes, much difficulty is being experienced in properly supplying water during the late fall and winter months on account of freezing. Attention was directed to this matter also and assurance received that a system of underground water pipes and drains is included in the improvements to be made at that point.

On the occasion of my visit to Moose Jaw on July 20th, 1910, I visited the stock yards and witnessed there a case of discrimination in favour of a large shipper as against a smaller one. I made three attempts to interview the divisional superintendent at that point on the subject but without success. I then addressed a letter to him but received no reply. Later I reported the matter to Mr. Dillinger of the Railway Commission who assured me that he would give the subject his personal attention in order to prevent a repetition of the occurrence.

On the occasion of a later visit, November 11th and 12th, 1910, I made special observation as to the treatment, as regards feed and water, the consignments belonging to the large and smaller shipments were receiving, but saw no evidence of discrimination. The quality of the hay supplied to all was wretched. Ninety per cent. of it consisted of old slough bottom from one to three years old. It was foul smelling and wholly unfit to sustain an animal which had just completed a journey of from thirty-six to forty hours without feed or water and had a similar one in prospect. This matter was reported to the General Live Stock Agent of the Canadian Pacific Railway who assured me that he would do his utmost to secure a better quality of feed at once.

HORSES.

The number of horses handled by the transportation companies up to November 1st, 1910, was in excess of that of any previous year. This was doubtless due in part to the increased demand which resulted in very high prices and to the shortage of pasture which resulted from the drought in the early part of the season.

In a portion of the province there was a severe epidemic of contagious abortion. In some instances as many as ninety per cent. of the foals were lost. An inspector of the Dominion Health of Animals Branch, Medicine Hat, was sent to the districts in which the greatest losses were sustained with a view to determining definitely

the cause and to make such suggestions as might prevent a repetition of it. After making a careful examination he gave it as his opinion that the difficulty was due to contagious abortion.

CATTLE.

The number of cattle handled by the transportation companies up to November 1st, 1910, was also far in excess of that of any previous year. The figures, however, are somewhat misleading because a much larger percentage of them than usual were stocker cattle and therefore do not represent finished animals but rather animals sent east or to more favoured localities within the province for the purpose of finishing.

There has been some inquiry for breeding animals of the special dairy breeds though, owing in part to the fact that no assistance was given by the Provincial Government in aid of the importation of these animals, the number of inquiries was not so great as that of a year ago. There has, however, been considerable inquiry from outlying districts for breeding animals of what are commonly called the dual purpose breeds. The settlers there claim that an animal of this type is better adapted to their conditions than one of special beef-producing or dairy types and there is every reason to believe that bulls of the beef breeds from good milking cows will find ready sale at remunerative prices.

SHEEP.

A notable feature of the sheep industry during the year 1910 was a general movement northward in herds of from two hundred to one thousand head. The encroachment of the settlers upon the old sheep ranges and the scarcity of pasture in those districts which have been devoted largely to wool growing caused a large number of ranchers to reduce the size of their flocks. At the same time conditions in the central portion of the province have tended to create an interest in wool and mutton production. For the past two years the coyote has not been as great a pest as formerly in most sections.

Institute speakers have been impressing upon the farmers the value of sheep as gleaners in the harvest fields and as cleaners of the land, and the result of their work is now being felt. In some instances also, this movement of the sheep northward is due to the fact that the farmers there are getting in a better condition financially and with the reduced price of fencing material they have been able to protect their flocks from dogs and coyotes by means of coyote-proof fencing.

While I am pleased to note the great interest that is being taken in wool and mutton production, I am convinced that all efforts at stocking our farms with small flocks of sheep without first having them protected from their natural enemies is but temporizing with the business and I am convinced that the sheep industry of Alberta will not be on a permanent basis until coyote-proof fencing can be secured by the ordinary farmer at a lower price than at present obtains.

With the assistance of the Poultry Superintendent, I was able to secure reduced prices on certain makes of fence for the farmers, when ordered in carload lots through the secretary of their association. This resulted in several carloads of coyote-proof fencing being constructed but the price is still beyond the reach of many and an effort will be made to obtain a still greater reduction.

SWINE.

There are many indications that the number of hogs marketed in 1910 will not equal that of a year ago. The number handled by the transportation companies from year to year is fairly representative of the progress of the industry. For the first ten months of 1910 the number reported is considerable less than for the same period of 1909.

During the months of April and May there was reported a heavy loss of young pigs. I made a personal investigation of some of the cases reported and in most instances it was evident that the loss was due to overfeeding, particularly with barley or wheat, or to a lack of exercise. There were some instances which, so far as I could ascertain, conditions were all that could be desired, and yet the losses were severe.

With a view to ascertaining if feeding some sort of supplementary food, rich in protein and bone-making material, would overcome this difficulty, I secured from the J. Y. Griffin Co., of Edmonton, a ton of digester tankage. This was distributed among a number of farmers who agreed to feed it to their brood sows according to directions supplied by myself, and to report the results of the experiment to me. The experiment was only partially successful. Some of the farmers who were supplied have failed to report at all. Some reported that there was no difference in the number of pigs saved from sows that were fed with the digester tankage and those which had been fed in the ordinary way. While others reported a very marked difference. Some of the farmers who had obtained a supply of tankage did not feed all of it to their brood sows and fed the remainder to their weanling pigs. Those who did so reported excellent results.

With a view to obtaining more definite knowledge of the swine industry of the province, about fifteen hundred circular letters were mailed to various swine growers of the province asking for the number of sows they were breeding; how many of these were purebred; the number of litters they endeavoured to secure from each per year; the number of pigs in each litter; their methods of feeding mature and immature animals; and also to state what difficulties they experienced in their efforts at swine growing in Alberta. As this work was begun but recently only a small percentage of the replies have been received. It is my intention to classify the information thus obtained and to furnish the institute speakers who will deliver addresses on this subject with copies of the same in order that their instructions to the farmers may have as direct a bearing upon conditions here as possible.

W. F. STEVENS,
Live Stock Commissioner.

9.—*THE REPORT OF THE PROVINCIAL MEDICAL
OFFICER OF HEALTH.*

SIR,—I beg to submit a report bearing upon public health, hospitals and charities, as dealt with in this office during the year ending December, 1910.

I.—PROVINCIAL BOARD OF HEALTH.

The Provincial Board of Health met at different times during the year and transacted what public business came before it.

It was hoped by the board that the demonstration plant in connection with Mr. Owens' "Live Earth Bed" system would have been established, but work in connection with this plant was stopped, the five thousand dollars asked for in connection with its construction not being available.

II.—CONTAGIOUS AND INFECTIOUS DISEASES.

There were in all during the year thirty-eight hundred and sixty-three cases of contagious and infectious disease reported at this office, as the tables which follow will show. Of these contagious diseases, typhoid and measles have been particularly prevalent. Outbreaks of smallpox this year have been diminished considerably; one outbreak, however, in the Athabasca Valley, was with difficulty controlled owing to the fact that amongst the half-breeds in that district a mild type of the disease may be said to be endemic. Three causes contributing to the difficulty of stamping out the disease in this particular district are: First, the amount of intercommunication of the half-breeds; second, the difficulty of carrying out proper medical measures owing to the lack of transportation facilities; third, the almost absence of physicians throughout such a wide territory.

The most marked features of the contagious diseases have been the widespread existence of typhoid fever throughout the province. Contributing causes of this have been: First, the great amount of railway construction and ditching operations with consequently the congregating of large numbers of men under conditions where ideal sanitation is difficult to maintain; Second, climatic conditions, favourable to flies which are the great medium for the spread of disease.

TYPHOID FEVER.
(Within Municipalities.)

POST OFFICE	SEX		MONTH												AGE						TOTAL		
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59		60-69	70-ov.
Calgary.....	154	75		1	1		2		4	69	113	36	2	1		7	58	60	92	9	2	1	229
Cardston.....																							
Clareholm.....	2	8	6	2		2											4	1	5				10
Daysland.....																							
Didsbury.....	185	25	9	4	2	8	4	7	6	42	44	64		20		7	11	99	89	4			210
Edmonton.....	2	3	1	1	1					2			1				2	1	2				5
Fort Saskatchewan.....	6	5	1		3			1	2	1	2		1				2	4	5				11
High River.....																							
Innisfail.....																		1					1
Lacombe.....		1			1																		
Leduc.....																							
Lethbridge.....	37	8	5	3	4	4	4	2			16		6	1	1	2	8	14	20				45
Macleod.....																							
Medicine Hat.....	59	14					12		18	27			16			3	4	32	32	2			73
Okotoks.....	2	2							2								1	1	1				2
Olds.....	12	10							10	10	1	1	1	1			6	8	4	3	1		22
Pincher Creek.....	4	1							2	2							1	2	2				5
Ponoka.....																							
Raymond.....																		1					1
Red Deer.....		1							1														
St. Albert.....																							
Stettler.....													81			1	6	30	18	21	4	1	81
Strathcona.....	44	37																					
Taber.....																							
Vegreville.....	8	1		2	1				2	1	1	2						5	4				9
Vermilion.....																							
Wetaskiwin.....																							
Totals.....	513	101	22	12	13	14	22	10	33	155	188	102	110	23	2	25	127	246	277	22	4	1	704



JUDGING HEAVY DRAFT HARNESS TEAMS AT AN ALBERTA EXHIBITION

SMALLPOX.
(Within Municipalities.)

POST OFFICE	SEX		MONTH												AGE						TOTAL		
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59		60-69	70-ov.
Calgary.....	24	9	9	5	5	3	6	5	2	2					1	3	4	11	10	5			33
Cardston.....	1	3	2													1	1		2				4
Clareholm.....	2																		2				2
Daysland.....																							
Didsbury.....																							
Edmonton.....	5	6		7	1		2	1								2	2	5	2				11
Fort Saskatchewan.....																							
High River.....																							
Innisfail.....	1											1					1						1
Lacombe.....																							
Leduc.....																							
Lethbridge.....	3	6	1	7	1											3	1	1	3	1			9
Macleod.....	1		1													1							1
Medicine Hat.....	1	2			2		1									1	1	1					3
Okotoks.....																							
Olds.....																							
Pincher Creek.....																							
Ponoka.....																							
Raymond.....																							
Red Deer.....					1													1					1
St. Albert.....	1																						
Stettler.....																							
Strathcona.....																							
Taber.....																							
Vegreville.....																							
Vermilion.....																							
Wetaskiwin.....																							
Totals.....	39	26	13	19	8	5	9	1	7	2	1	1			1	10	8	20	20	6			65

CHICKENPOX.
(Within Municipalities.)

POST OFFICE	SEX		MONTH												AGE						TOTAL		
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59		60-69	70-OV.
Calgary.....	5	10		2	2				1	2			5	3	1	3	11						15
Cardston.....																							
Clareholm.....	3	6	6	3											1	3	4		1				9
Daysland.....																							
Didsbury.....																							
Edmonton.....	19	18	3	4	10	5	2	3		1	4	4		1	1	17	11	5	3				37
Fort Saskatchewan.....	1	7	1	1	5				2							2	6						8
High River.....	10	4	2	5	5	1								1		2	9	3					14
Innisfail.....	1	3										4				1	3						4
Lacombe.....																							
Leduc.....																							
Lethbridge.....	2	1	1								1			2		2	5		1				3
Macleod.....	5	2				2		5							1	1							7
Medicine Hat.....																							
Okotoks.....		2		2													2						2
Olds.....		1	1														2						2
Pincher Creek.....		3									2		3				3						3
Ponoka.....																							
Raymond.....																							
Red Deer.....																							
St. Albert.....	1			1													1						1
Stettler.....																							
Strathcona.....																							
Taber.....																							
Vegreville.....																							
Vermilion.....																							
Wetaskiwin.....																							
Totals.....	48	57	12	17	22	8	2	8	3	3	7	8	8	7	4	31	57	8	5				105

DIPHTHERIA.
(Within Municipalities.)

POST OFFICE	SEX		MONTH												AGE						TOTAL		
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59		60-69	70-ov.
Calgary.....	17	20	2		6	4	13				1	4	2	5		4	10	10	13				37
Cardston.....																							
Claresholm.....																							
Daysland.....																							
Didsbury.....																							
Edmonton.....	19	14		4	4	4	4	5	4	4		3		1	1	7	12	11	2				33
Fort Saskatchewan.....	1	4					2	1		1					1	1	1	4					5
High River.....	1	1		1		1									1	1			1				2
Innisfail.....																							
Lacombe.....																							
Leduc.....																							
Lethbridge.....	3	2			1	1	1	1					2		1	1	3		1				5
Macleod.....	1								1								1						1
Medicine Hat.....																							
Okotoks.....													3			1				1			3
Olds.....		3																		1			1
Pincher Creek.....												1	1			1	1		2				5
Ponoka.....	2	3					3																
Raymond.....																							
Red Deer.....																							
St. Albert.....																							
Stettler.....																							
Strathcona.....	1	1			2												2						2
Taber.....																							
Vegreville.....	1	1						1	1						1	1							2
Vermilion.....																							
Wetaskiwin.....	1	6			3		4								4	4	2		1				7
Totals.....	47	55	2	4	16	10	27	8	6	5	3	8	7	6	1	21	36	21	21	2			102

SCARLET FEVER.
(Within Municipalities.)

POST OFFICE	SEX		MONTH												AGE						TOTAL		
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY.	JUNE.	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59		60-69	70-ov.
Calgary.....	67	71	4	9	12	17	27	1	8	2	3	7	29	19	2	38	64	20	14	..	..	..	138
Cardston.....	3	3	3	..	2	..	1	..	..	..	..	..	..	..	1	2	3	..	..	..	..	..	6
Clareholm.....	6	11	..	3	12	..	..	..	..	..	..	..	..	2	..	5	10	2	..	..	..	..	17
Daysland.....	1	2	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	3
Didsbury.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1
Edmonton.....	89	75	19	12	21	22	33	11	13	12	8	6	..	7	2	36	83	36	6	1	..	..	164
Fort Saskatchewan.....	1	1	1	..	..	..	..	..	..	..	1	..	1	..	..	1	1	..	..	..	..	..	2
High River.....	4	4	1	2	1	2	2	2	..	..	..	..	..	..	..	1	5	1	1	..	..	..	8
Innisfail.....	1	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1
Lacombe.....	6	4	..	..	..	5	3	2	..	..	..	..	..	..	..	..	3	3	1	..	..	..	10
Leduc.....	7	5	..	..	..	..	..	12	..	..	..	..	..	..	..	..	8	2	..	..	..	..	12
Lethbridge.....	21	22	9	19	5	1	1	5	..	..	1	..	1	1	1	6	25	7	4	..	..	..	43
Macleod.....	13	12	..	1	2	4	2	18	..	..	..	..	..	..	1	8	15	2	1	..	..	..	27
Medicine Hat.....	10	6	1	2	1	3	2	6	..	..	..	..	1	..	..	5	9	2	..	..	..	..	16
Okotoks.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Olds.....	1	1	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	1
Pincher Creek.....	1	5	..	..	1	2	3	..	..	..	..	..	..	..	..	2	4	..	..	..	..	..	6
Ponoka.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Raymond.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Red Deer.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
St. Albert.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stettler.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Strathcona.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taber.....	1	1	..	..	2	..	2	2	2	..	..	..	..	..	..	3	2	..	1	..	..	..	2
Vegreville.....	1	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	6
Vermilion.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wetaskiwin.....	4	3	..	..	..	..	..	1	..	..	1	..	4	1	..	..	6	1	..	..	..	..	7
Totals.....	238	232	37	48	58	55	79	61	23	14	15	13	36	31	7	114	241	77	30	1	..	..	470

MEASLES.
(Within Municipalities.)

POST OFFICE		SEX		MONTH												AGE							
				JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59	60-69	70-ov.	TOTAL
Calgary.....	268	235	29	62	137	182	66	2	12	4	1	4	4	9	104	237	85	65	3	..	..	..	503
Cardston.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	1	1	..	..	4
Clareholm.....	4	..	1	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15
Daysland.....	12	3	6	6	..	..	..	1	..	..	..	2	..	1	3	7	3	1	..	..	..	..	15
Didsbury.....	200	164	2	4	66	62	52	118	48	10	..	..	..	7	94	161	72	29	1	..	..	..	364
Edmonton.....	4	1	1	1	1	1	2	1	1	..	..	..	..	1	9	13	3	3	..	..	..	..	5
Fort Saskatchewan.....	19	19	1	1	27	4	2	2	1	..	..	..	..	3	9	23	7	4	5	..	..	..	38
High River.....	2	2	..	..	..	..	3	1	..	..	..	..	..	..	3	1	1	2	1	..	..	..	4
Innisfail.....	3	..	..	..	..	..	2	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Lacombe.....	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	2	1	..	..	..	4
Leduc.....	9	8	..	3	1	6	1	..	..	..	1	..	3	3	2	3	7	3	1	..	..	..	17
Lethbridge.....	7	5	..	..	1	2	1	8	..	..	..	..	..	1	2	2	3	3	1	..	..	..	2
Macleod.....	33	1	4	16	28	..	..	..	17	..	..	..	1	6	14	23	4	3	2	..	..	..	52
Medicine Hat.....	19	10	1	11	..	..	2	1	3	..	..	..	..	1	3	6	3	1	..	..	..	..	17
Okotoks.....	9	10	1	11	..	..	2	1	..	..	..	..	..	1	3	4	7	2	2	..	..	..	19
Olds.....	4	2	..	..	5	..	..	..	..	..	..	..	..	..	4	1	1	1	..	..	..	..	6
Pincher Creek.....	9	8	2	9	5	1	..	..	..	..	..	..	..	..	1	14	1	1	..	..	..	..	17
Ponoka.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Raymond.....	1	1	..	..	..	..	..	..	..	1	..	..	1	1	1	2	2	2	..	..	..	..	1
Red Deer.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
St. Albert.....	3	4	..	5	1	..	1	1	..	..	..	..	..	..	1	2	2	1	2	..	..	..	7
Stettler.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Strathcona.....	..	1	..	..	..	..	2	8	..	..	..	..	..	..	..	1	6	..	..	1	..	..	12
Taber.....	4	8	..	..	1	..	4	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	2
Vegreville.....	25	16	..	..	2	32	6	..	..	..	1	..	..	2	9	25	1	3	1	..	..	..	41
Vermilion.....	22	14	..	1	..	32	2	..	..	..	..	..	..	..	10	22	2	2	..	..	..	..	36
Wetaskiwin.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals.....	635	545	42	101	238	315	203	154	83	16	2	3	10	13	31	276	535	201	118	19	..	..	1,180

ERYSIPELAS.
(Within Municipalities.)

POST OFFICE	SEX		MONTH												AGE							TOTAL	
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59	60-69		70-ov.
Calgary.....	4	2		1								1	2	2				2	4				6
Cardston.....	1					1													1				1
Clareholm.....		1					1																1
Daysland.....																							
Didsbury.....																							
Edmonton.....	29	6	1	1	1	5	8	7	3	1		2		6			2	12	16	5			35
Fort Saskatchewan.....	1						1												1				1
High River.....																							
Innisfail.....																							
Lacombe.....					2					1							1				1		3
Leduc.....	2	1																					
Lethbridge.....																							
Macleod.....																							
Medicine Hat.....																							
Okotoks.....																							
Olds.....																							
Pincher Creek.....	1						1												1				1
Ponoka.....	1												1						1				1
Raymond.....																							
Red Deer.....																							
St. Albert.....																							
Stettler.....																							
Strathcona.....																							
Taber.....																							
Vegreville.....	1	5				2	3	1										1	3	2			6
Vermilion.....																							
Wetaskiwin.....	2	1											2	1			1	1	1				3
Totals.....	43	16	1	2	3	9	14	8	3	2		3	5	9		1	4	17	29	7	1		59

TUBERCULOSIS.
(Within Municipalities.)

POST OFFICE	SEX		AGE												AGE							TOTAL	
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59	60-69		70-ov.
Calgary.....																							
Cardston.....																							
Clareholm.....																							
Daysland.....																							
Didsbury.....	23	8	1	3	2	2	3	3	5	2	1	4		5		1		12	9	8	1		31
Edmonton.....																		2	1				3
Fort Saskatchewan.....																		1					1
High River.....			1																				
Innisfail.....																							
Lacombe.....																							
Leduc.....																							
Lethbridge.....	5	1			2	1	1	1				1						2	6				6
Macleod.....	2	1		1	1							1						1					3
Medicine Hat.....																							
Okotoks.....																							
Olds.....														1									1
Pincher Creek.....														1						1			1
Ponoka.....	1													1						1			1
Raymond.....																							
Red Deer.....																							
St. Albert.....																							
Stettler.....																							
Strathcona.....																							
Taber.....	1			1																1			1
Vegreville.....																							
Vermilion.....																							
Wetaskiwin.....																							
Totals.....	32	15	2	5	5	4	4	5	5	2	3	5	2	5		1		16	20	9	1		47

DEPARTMENT OF AGRICULTURE

MUMPS.
(Within Municipalities.)

POST OFFICE	SEX		MONTH												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59	60-69	70-ov.	TOTAL
Calgary.....	1												1						1				1
Cardston.....																							
Clareholm.....																							
Daysland.....																							
Didsbury.....																							
Edmonton.....	3		1		1												1	1	1				3
Fort Saskatchewan.....																							
High River.....																							
Innisfail.....																							
Lacombe.....																							
Leduc.....																							
Lethbridge.....																							
Macleod.....																							
Medicine Hat.....																							
Okotoks.....																							
Olds.....																							
Pincher Creek.....																							
Ponoka.....																							
Raymond.....																							
Red Deer.....																							
St. Albert.....																							
Stettler.....																							
Strathcona.....																							
Taber.....																							
Vegreville.....																							
Vermilion.....																							
Wetaskiwin.....																							
Totals.....	4		1	1	1	1							1				1	1	2				4

WHOOPIING COUGH.
(Within Municipalities.)

POST OFFICE	SEX		MONTH												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59	60-69	70-ov.	TOTAL
Calgary.....	2	3											5		1	2	2						5
Cardston.....																							
Clareholm.....																							
Daysland.....																							
Didsbury.....																							
Edmonton.....	4	5	1	2	1	1		1	1			1		2	1	1	7						9
Fort Saskatchewan.....																							
High River.....																							
Innisfail.....	3				1			2								1	2						3
Lacombe.....																							
Leduc.....																							
Lethbridge.....																							
Macleod.....																							
Medicine Hat.....																							
Okotoks.....																							
Olds.....																							
Pincher Creek.....																							
Ponoka.....																							
Raymond.....																							
Red Deer.....																							
St. Albert.....																							
Stettler.....																							
Strathcona.....																							
Taber.....																							
Vegreville.....																							
Vermilion.....																							
Wetaskiwin.....																							
Totals.....	9	8	1	1	2	2		3	1	1	1	1	5	2	2	4	11						17

GERMAN MEASLES.
(Within Municipalities.)

POST OFFICE	SEX		MONTH												AGE						TOTAL		
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59		60-69	70-ov.
Calgary.....	5	5	5		5											1	1	4	4				10
Cardston.....																							
Clareholm.....																							
Daysland.....																							
Didsbury.....																							
Edmonton.....	31	25		6	12	5	20	10	1	2						10	30	11	5				56
Fort Saskatchewan.....																							
High River.....																							
Innisfail.....																							
Lacombe.....																							
Leduc.....																							
Lethbridge.....	5	9		1	1	1	3	3					1	4		2	6	6					14
Macleod.....	2				2													2					2
Medicine Hat.....																							
Okotoks.....	6	6	1		4	7											10	1	1				12
Olds.....																							
Pincher Creek.....	5	2					7									1	2	2	2				7
Ponoka.....																							
Raymond.....																							
Red Deer.....																							
St. Albert.....																							
Stettler.....																							
Strathcona.....																							
Taber.....																							
Vegreville.....																							
Vermilion.....	1		1																1				1
Wetaskiwin.....																							
Totals.....	55	47	7	7	24	13	30	13	1	2			1	4		14	49	27	12				102

TYPHOID FEVER.
(In Rural Districts.)

POST OFFICE	SEX		MONTH												AGE						TOTAL		
	M	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59		60-69	70-ov.
Calgary.....	54	16	1	1			1	2	4	15	27	8	6	5		3	9	16	40	2			70
Cardston.....		1											1				1	1					1
Clareholm.....	24	9		1					3	10	16	2		1			3	13	16	1			33
Daysland.....		2								1	1							2					2
Didsbury.....	3	5			1					2	5			1			3	2	2	1			8
Edmonton.....	13	1						1	1	7	5			1			1	7	6				14
Fort Saskatchewan.....	4	1	1	1	1						1							2	3				5
High River.....	1										1							1					1
Innisfail.....	2	2								3	1	1						3					4
Lacombe.....	3	7								7		2		1			1	3	4	2			10
Leduc.....		1									1							1					1
Lethbridge.....	32	15	6	1	9	1	1	2	2	6	4	14	1	3		1	9	14	21	1		1	47
Macleod.....	4																2	1	1				4
Medicine Hat.....	2										1	1	1				1	1					2
Okotoks.....	1											1											1
Olds.....	10	4								2	12						2	5	6	1			14
Pincher Creek.....											2	3				1	1	2	1				5
Ponoka.....	4	1																					
Raymond.....																							
Red Deer.....																							
St. Albert.....	6	3								2	5	2					2	4	3				9
Stettler.....	3	2		3						1	1			1			3		2				5
Strathcona.....		1												1				1					1
Taber.....																							
Vegreville.....	5	2								4	2	1					2	1	3	1			7
Vermilion.....	2	1								1	2							1	2				3
Wetaskiwin.....	2											2					1	1					2
Totals.....	175	74	8	7	11	1	2	2	10	61	86	37	12	12		5	40	80	113	10		1	249

SMALLPOX.
(In Rural Districts.)

POST OFFICE	SEX		MONTH												AGE						TOTAL		
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59		60-69	70-ov.
Calgary.....	3	5	2					2	1	3					1	1		2	4				8
Cardston.....																							
Clareholm.....																							
Daysland.....																							
Didsbury.....																							
Edmonton.....	7	6		4	4					1	4				1		9	3					13
Fort Saskatchewan.....																							
High River.....	6	3	1		8										1		1	3	4	1			9
Innisfail.....	1																	1					1
Lacombe.....					1													1					
Leduc.....	2	1						3										1	2				4
Lethbridge.....	4			4														1					
Macleod.....																							
Medicine Hat.....																							
Okotoks.....																							
Olds.....	1	3		3	1												2	2					4
Pincher Creek.....																							
Ponoka.....	2			1	1													1	1				2
Raymond.....																							
Red Deer.....																							
St. Albert.....																							
Stettler.....	1	1																					
Strathcona.....																							
Taber.....																							
Vegreville.....																							
Vermilion.....																							
Wetaskiwin.....																							
Totals.....	27	20	3	12	14	2		5	1	4	4	1	1		2	1	12	16	14	1	1		47

CHICKENPOX
(In Rural Districts.)

POST OFFICE	SEX		MONTH												AGE						TOTAL		
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59		60-69	70-ov.
Calgary.....	1	2	2										1				3						3
Cardston.....																							
Clareholm.....																							
Daysland.....																							
Didsbury.....																							
Edmonton.....								1															
Fort Saskatchewan.....		1																					
High River.....	2	1			3							2											1
Innisfail.....		2																					
Lacombe.....																							
Leduc.....	2								2								1	1					2
Lethbridge.....																							
Macleod.....	3	4					3																7
Medicine Hat.....	4	2										4	2		1	2	1	1	1				6
Okotoks.....	1		1																			1	1
Olds.....																							
Pincher Creek.....	1	2						1		1							3						3
Ponoka.....																							
Raymond.....																							
Red Deer.....																							
St. Albert.....																							
Stettler.....																							
Strathcona.....																							
Taber.....																							
Vegreville.....	3	3											5	1			3	2	1				6
Vermilion.....																							
Wetaskiwin.....																							
Totals.....	17	17	3	3	3		3	2	2	1	1	6	8	5	1	6	20	4	2		1		34

DEPARTMENT OF AGRICULTURE

DIPHTHERIA.
(In Rural Districts.)

POST OFFICE	SEX		MONTH												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59	60-69	70-ov.	TOTAL
Calgary.....	7	6			1	4	3	5								5	5	2	1				13
Cardston.....																							
Clareholm.....	2			1							1					2							2
Daysland.....	1	1	2													1			1				2
Didbury.....	4	10	1	1				2		1	3			6	1	1	10	2					14
Edmonton.....	2							2									1	1					2
Fort Saskatchewan	4	4	5	1	2						1					2	4	1	1				2
High River.....																	1						1
Innisfail.....	1																						1
Lacombe.....	2	1							3									2	1				3
Leduc.....																							
Lethbridge.....																							
Macleod.....		4	1	1	1				1								3	1					4
Medicine Hat.....	4	4		2		1				1				4		1	5	1	1				8
Okotoks.....	1	2								2							2	1					3
Olds.....	1	1						1								1							1
Pincher Creek.....	5	4		1	3		1	2			1	1			1	2	1	1	2	2			9
Ponoka.....																							
Raymond.....																							
Red Deer.....	1										1						1						1
St. Albert.....	1	3		4													4						4
Stettler.....																							
Strathcona.....		1												1			1						1
Taber.....																							
Vegreville.....	9	7										8	8			?	10	2	1				16
Vermilion.....																							
Wetaskiwin.....		1												1			1						1
Totals.....	44	40	9	11	7	5	4	12	5	4	7	1	8	12	2	18	49	14	8	2			93

SCARLET FEVER.
(In Rural Districts.)

POST OFFICE	SEX		MONTH												AGE						TOTAL		
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY.	JUNE.	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.	1-0	1-4	5-14	15-24	25-44	45-59		60-69	70-ov.
Calgary.....	35	20	1	1	7	4	1	21	2	4	2		10	2		10	31	10	3	1			55
Cardston.....																							
Clareholm.....	3	3							1	2							3	3					3
Daysland.....	3	3			2	1	1		1	1							3	3					6
Didsbury.....	6	6												12			9	1					12
Edmonton.....	7	6	2	1	1	1	8									3	7	1					13
Fort Saskatchewan.....	3	3			1							2				1	2						3
High River.....	15	13	6	8	12						1			1		7	15	5	1				28
Innisfail.....																							
Lacombe.....	8	7			1		2		3	3				1		6	1	1	2				10
Leduc.....	3	2					5									2	2	1					5
Lethbridge.....	2				2												2						2
Macleod.....	4	2					5				1					2	4						6
Medicine Hat.....	2	1						1	2							1	2						3
Okotoks.....																							
Olds.....	10	5			2							2	11			3	9	2	1				15
Pincher Creek.....	13	12	1		1			3	1		2	6	10	1		6	16	2	1				25
Ponoka.....																							
Raymond.....																							
Red Deer.....	1										1		1					1					1
St. Albert.....																							
Stettler.....	1	1									2						2						2
Strathcona.....	1										1						1						1
Taber.....		4			4											2	2						4
Vegreville.....	1	1							2								2						2
Vermilion.....	11	10	1	1	15						1			3	1	8	4	3	5				21
Wetaskiwin.....																							
Totals.....	121	96	11	11	33	21	22	25	12	10	11	10	20	31	1	55	117	30	13	1			217

MEASLES.
(In Rural Districts.)

POST OFFICE		SEX		MONTH												AGE					TOTAL				
				JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44		45-59	60-69	70-ov.	
M.	F.	34	27	7	3	2	6	26	13	1	3					2	15	29	9	5	1			61	

ERYSIPPELAS.
(In Rural Districts.)

POST OFFICE	SEX		MONTH												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59	60-69	70-ov.	TOTAL
Calgary.....	1							1												1			1
Cardston.....																							
Clareholm.....	1								1										1				1
Daysland.....	1																	1					1
Didsbury.....																							
Edmonton.....																							
Fort Saskatchewan.....					1												1						1
High River.....																							
Innisfail.....																							
Lacombe.....																							
Leduc.....	2					1											1						2
Lethbridge.....																							
Macleod.....	1				1			1									1						2
Medicine Hat.....																							
Okotoks.....																							
Olds.....	1																						1
Pincher Creek.....																							
Ponoka.....																							
Raymond.....																							
Red Deer.....																							
St. Albert.....	1																						1
Stettler.....																							1
Strathcona.....																							
Taber.....																							
Vegreville.....	1																			1			
Vermilion.....																							
Wetaskiwin.....																							
Totals.....	9	4	1	1	3	1	1	1	1	1	1	1		4		3	2	5	3				13

TUBERCULOSIS.
(In Rural Districts.)

POST OFFICE	SEX		AGE												MONTH						TOTAL		
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59		60-69	70-ov.
Calgary.....	6	4	1	2						3	1	2			1		2	1	6	1			10
Cardston.....																							
Clareholm.....	1	2						2	1										3				3
Daysland.....	1	1	1					1											1	1			2
Didsbury.....																							
Edmonton.....	3	4			3	1	1	2		1		1	1	1				6	1				7
Fort Saskatchewan.....	2	2						1										1	2	1			4
High River.....	2	1						2							1			1	1	1			3
Innisfail.....																							
Lacombe.....																							
Leduc.....																							
Lethbridge.....	2		2																2				2
Macleod.....																							
Medicine Hat.....	1	2							1	1					1				2	1			3
Okotoks.....																							
Olds.....	3	1								3	1							2	2				4
Pincher Creek.....		1												1				1					1
Ponoka.....																							
Raymond.....																							
Red Deer.....		1					1											1					1
St. Albert.....																							
Stettler.....																							
Strathcona.....																							
Taber.....	1			1															1				1
Vegreville.....																							
Vermilion.....	2	2			2		1	1										2					4
Wetaskiwin.....	1													1					1				1
Totals.....	25	21	1	4	7	1	3	10	1	8	2	3	3	3	3		4	14	23	5			46

MUMPS.
(In Rural Districts.)

POST OFFICE	SEX		MONTH												AGE						TOTAL			
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59		60-69	70-ov.	
Calgary.....	4	1			1		2	1	1											4	1			5
Cardston.....																								
Clareholm.....																								
Daysland.....																								
Didsbury.....																								
Edmonton.....																								
Fort Saskatchewan.....																								
High River.....																								
Innisfail.....																								
Lacombe.....																								
Leduc.....																								
Lethbridge.....	1				1													1						1
Macleod.....																								
Medicine Hat.....																								
Okotoks.....					2													1						2
Olds.....	2																							
Pincher Creek.....																								
Ponoka.....																								
Raymond.....																								
Red Deer.....																								
St. Albert.....																								
Stettler.....	1	1					2											2						2
Strathcona.....																								
Taber.....																								
Vegreville.....																								
Vermilion.....																								
Wetskiwin.....																								
Totals.....	8	2			4		4	1	1	1								3	2	4	1			10

WHOOPING COUGH.
(In Rural Districts.)

POST OFFICE	SEX		MONTH												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59	60-69	70-ov.	TOTAL
Calgary.....	1						1								1								1
Cardston.....																							
Clareholm.....																							
Daysland.....		2									2					1	1						2
Didsbury.....																							
Edmonton.....	1						1										1						1
Fort Saskatchewan.....																							
High River.....																							
Innisfail.....																							
Lacombe.....																							
Leduc.....																							
Lethbridge.....		3												3									3
Macleod.....	10	3	4	3			2	4							2	6	5						13
Medicine Hat.....																							
Okotoks.....																							
Olds.....																							
Pincher Creek.....																							
Ponoka.....	2				2											1	1						2
Raymond.....																							
Red Deer.....																							
St. Albert.....																							
Stettler.....	1	4				5										3	1		1				5
Strathcona.....																							
Taber.....																							
Vegreville.....																							
Vermilion.....																							
Wetaskiwin.....																							
Totals.....	15	12	4	3	2	5	4	4			2			3	2	12	12	1	1				27

GERMAN MEASLES.
(In Rural Districts.)

POST OFFICE	SEX		MONTH												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59	60-69	70-ov.	TOTAL
Calgary.....																							
Cardston.....																							
Clareholm.....																							
Daysland.....																							
Didsbury.....		1			1														1				1
Edmonton.....																							
Fort Saskatchewan.....																							
High River.....																							
Innisfail.....																							
Lacombe.....																							
Leduc.....																							
Lethbridge.....																							
Macleod.....																							
Medicine Hat.....																							
Okotoks.....																							
Olds.....																							
Pincher Creek.....																							
Ponoka.....																							
Raymond.....																							
Red Deer.....																							
St. Albert.....																							
Stettler.....																							
Strathcona.....																							
Taber.....																							
Vegreville.....																							
Vermilion.....																							
Wetaskiwin.....																							
Totals.....		1			1														1				1

DEPARTMENT OF AGRICULTURE

TOTAL NUMBER OF INFECTIOUS AND CONTAGIOUS DISEASES WITHIN AND WITHOUT MUNICIPALITIES, REPORTED DURING THE YEAR 1910.

POST OFFICE	SEX		MONTH												AGE						TOTAL		
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0-1	1-4	5-14	15-24	25-44	45-59		60-69	70-ov.
Typhoid Fever—																							
Within Municipalities.....	513	191	22	12	13	14	22	10	33	155	188	102	110	23	2	25	127	246	277	22	4	1	704
In Rural Districts.....	175	74	8	7	11	1	2	2	10	61	86	37	12	12	5	40	80	113	10	1	1	249	
Total.....	688	265	30	19	24	15	24	12	43	216	274	139	122	35	2	30	167	326	390	32	4	2	953
Smallpox—																							
Within Municipalities.....	39	26	13	19	8	5	9	1	7	2	..	1	..	..	1	10	8	20	20	6	..	..	65
In Rural Districts.....	27	20	3	12	14	2	..	5	1	4	4	1	1	..	2	1	12	16	14	1	1	..	47
Total.....	66	46	16	31	22	7	9	6	8	6	4	2	1	..	3	11	20	36	34	7	1	..	112
Chickenpox—																							
Within Municipalities.....	48	57	12	17	22	8	2	8	3	3	7	8	8	7	4	31	57	8	5	..	..	..	105
In Rural Districts.....	17	17	3	..	3	..	3	2	2	1	1	6	8	5	1	6	20	4	2	..	..	..	34
Total.....	65	74	15	17	25	8	5	10	5	4	8	14	16	12	5	37	77	12	7	..	1	..	139
Diphtheria—																							
Within Municipalities.....	47	55	2	4	16	10	27	8	6	5	3	8	7	6	1	21	36	21	21	2	..	..	102
In Rural Districts.....	44	49	9	11	7	5	4	12	5	4	7	9	8	12	2	18	49	14	8	2	..	..	93
Total.....	91	104	11	15	23	15	31	20	11	9	10	17	15	18	3	39	85	35	29	4	..	..	195
Scarlet Fever—																							
Within Municipalities.....	238	232	37	48	58	55	79	61	23	14	15	13	36	31	7	114	241	77	30	1	..	..	470
In Rural Districts.....	121	96	11	11	33	21	22	25	12	10	11	10	20	31	1	55	117	30	13	1	..	..	217
Total.....	359	328	48	59	91	76	101	86	35	24	26	23	56	62	8	169	358	107	43	2	..	..	687
Measles—																							
Within Municipalities.....	635	545	42	101	238	315	203	154	83	16	2	3	10	13	31	276	535	201	118	19	..	..	1,180
In Rural Districts.....	146	125	14	13	66	37	61	39	8	16	10	2	5	5	9	66	113	57	18	8	..	..	271
Total.....	781	670	56	114	304	352	264	193	91	32	12	5	10	18	40	342	648	258	136	27	..	..	1,451
Erysipelas—																							
Within Municipalities.....	43	16	1	2	3	9	14	8	3	2	..	3	5	9	..	1	4	17	29	7	1	..	59
In Rural Districts.....	9	4	1	..	3	..	1	1	1	1	1	..	..	4	..	..	3	2	5	3	..	..	13
Total.....	52	20	2	2	6	9	15	9	4	3	1	3	5	13	..	1	7	19	34	10	1	..	72

[illegible]

III.—PUBLIC HEALTH INSPECTION.

Report by Dr. Barrow, Provincial Medical Inspector, for the year 1910:

During the year the following places were visited on the dates mentioned for investigation or arrangements to be made in consequence of outbreaks of infectious or contagious disease.

INFECTIOUS AND CONTAGIOUS DISEASES.

Smallpox.

Calgary (at Nose Creek).....	January 3 to 8.
Langdon.....	January 5.
Exshaw.....	January 7.
Claresholm.....	January 14.
Taber.....	January 14 and 15.
Calgary (at Nose Creek).....	January 19.
Claresholm.....	January 26 and 27.
Frank (at Passburg).....	January 28.
North Edmonton.....	February 19.
Blairmore.....	February 23.
Bon Accord.....	February 28.
Lethbridge.....	March 11.
Langdon.....	March 18 and 19.
Castor.....	April 23 to 25.
Athabasca Landing and Grand Rapids (at Athabasca River).....	May 25 to June 18.
Leduc.....	January 22 and 23.
Cardston.....	August 8 to 10.
Strathmore.....	August 12.
Calgary.....	August 12.
Pakan.....	September 3.
Andrew.....	September 3.
Red Deer.....	September 29.
Frank.....	December 14.

Diphtheria.

Carstairs.....	January 8 to 10.
Nanton.....	January 13.
Morinville.....	March 29.
Medicine Hat (at Carlstadt).....	May 12 and 13.
Carlstadt.....	May 12.
Andrew.....	September 3.
Carlstadt.....	September 21 and 22.
Coronation School District.....	September 27.
Coronation School District.....	October 10.

Scarlet Fever.

Exshaw.....	January 7.
Nanton.....	January 13.
Bon Accord.....	February 13.
Coronation School District.....	March 16.
Leduc.....	June 22 and 23.
Canmore.....	July 5 to 8.
Champion.....	September 7.
Bow Island.....	September 23.

Chickenpox.

Bankhead.....	January 17.
Camrose (Sifton School District).....	March 5.

Measles.

Canmore.....	January 18.
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Typhoid Fever.

Canmore.....	January 18.
Lethbridge (at coal mine).....	March 21 and 22.
Lethbridge (at coal mine).....	May 13 and 14.
Carmangay.....	September 6 to 8.
Calgary.....	September 20.
Bassano.....	September 21.

Cholera.

Camrose (exposure to infection in Germany).....	September 13.
Airdrie (Duties of local board of health in cases of infectious diseases).....	May 18.

The following places have been visited for investigation or advice in regard to matters of sanitation:

Pincher Creek.....	May 9 and 10.
Stettler.....	May 30, April 1.
Calgary (sanitation outside city).....	May 17.
Carmangay.....	September 6 to 8.
Calgary (Riches' pig ranch).....	September 9 and 10.
Canmore.....	December 9.

The following slaughter houses have been inspected:

DATE.	SLAUGHTER HOUSE.	TOWN.
January 26 and 27.....	Williams' slaughter house.....	Claresholm.
March 7 and 8.....	Williams' slaughter house.....	Claresholm.
May 17.....	Dominion Meat Co.'s slaughter house, Calgary.	
August 30.....	Hehdsdoerfer's slaughter house.....	Strathcona.
September 9 and 10.....	Slaughter house.....	Calgary.

The following places have been visited with regard to diseases among animals:

Calgary (hog fever).....	December 12 and 13.
Calgary (hog cholera).....	December 16.

The following families reported as destitute have been visited by me and their circumstances inquired into:

NAME	TOWN	DATE
Mite Weitman.....	Claresholm.....	January 13.
Henry Collins.....	Medicine Hat Hospital.....	January 16.
George Eve.....	Edmonton.....	February 1.
Mite Weitman.....	Claresholm.....	March 8.
John Flynn.....	Macleod.....	March 9.
Mrs. Legay.....	Edmonton.....	March 15.
Mrs. Butchart.....	Edmonton.....	March 15.
Mrs. Nellie Pitt.....	Strathcona.....	March 15.
Fred Whitlow.....	Pine Lake.....	April 1 and 2.
Mrs. Butchart.....	Edmonton.....	April 11.
D. H. Douglass.....	Edmonton.....	April 11.
Mrs. C. A. Fisher.....	Innisfail.....	April 13 and 14.
Mrs. Nellie Pitt.....	Mannville.....	April 19 to 21.
Zonor Bertrand.....	Edmonton General Hospital.....	May 9.
Ruth Collins.....	Wetaskiwin.....	May 10 and 11.
Mrs. Adams.....	Medicine Hat.....	May 12.
Frank Coombs.....	Cochrane.....	May 16.
George Robinson.....	Edmonton General Hospital.....	September 1.
James Murray.....	Edmonton.....	September 13.
Samuel Grimes.....	Leduc.....	September 16.
Stanley Bokowski.....	Carlstadt.....	September 21 and 22.
James Murray.....	Edmonton.....	October 14.
Helen Woyevitka.....	Edmonton.....	October 26.
Peter Conrad.....	Edmonton.....	October 27.
Paul Rose.....	Lacombe.....	December 6 and 7.
W. Endell.....	Ponoka.....	December 7 and 8.
Mike Ruptasch.....	Canmore.....	December 9.

The following hospitals, in receipt of financial assistance from the Provincial Government (or applying for such assistance) have been inspected by me:

HOSPITAL.	TOWN.	DATE.
Municipal Hospital...	Camrose.....	March 4.
General Hospital....	Macleod.....	March 9.
Memorial Hospital....	Pincher Creek..	March 10.
Galt Hospital.....	Lethbridge.....	March 10
General Hospital.....	Medicine Hat..	March 22.
General Hospital....	Lacombe.....	April 13
Memorial Hospital....	Red Deer.....	April 15
Roland M. Boswell Hospital..	Vegreville.....	April 21
General Public Hospital	Strathcona....	April 29
General Hospital.....	Calgary.....	May 17
United Mine Workers' Hospital.	Canmore.....	July 5 to 8
Holy Cross Hospital....	Calgary.....	August 11
General Hospital....	Edmonton.....	August 29
General Hospital	Cardangay....	September 7
Galt Hospital.....	Lethbridge....	September 9
Public Hospital.....	Bawlf.....	September 15
Providence General Hospital..	Daysland.....	September 15
Scandinavian Hospital	Wetaskiwin....	September 16
General Hospital....	Medicine Hat..	September 22
City Hospital	Edmonton....	September 28
Memorial Hospital.....	Red Deer....	September 29
General Hospital.....	Lacombe.....	September 30
Geo. McDougall Hospital.....	Pakan.....	September 2
Isolation Hospital.....	Edmonton....	October 5
Roland M. Boswell Hospital....	Vegreville.....	October 18
United Mine Workers' Hospital	Canmore.....	December 9
Memorial Hospital.....	Pincher Creek	December 14
General Hospital....	Macleod.....	December 15
Isolation Hospital.....	Calgary.....	December 16

I take this opportunity of expressing my appreciation of the courteous assistance I have at all times received from the Medical Officers of Health and local councils with whom my duties have brought me in contact. To the officers and constables of the Royal North-West Mounted Police I am also indebted for much valuable help.

V. E. BARROW, M.D.,
Provincial Medical Inspector.

NO.	HOSPITAL	LOCATION	REVENUE.							EXPENDITURE.							LIABILITIES.					
			Proceeds of loans and Mortgages	Cash on hand Jan. 1, 1910	CONTRIBUTIONS					Cost of Main- tenance	Expended on Build- ings	Expended on Furnish- ings	Interest on loans and Mortgages	Repayment of loans and Mortgages	Cash on Hand Dec. 31, 1910	TOTAL	Interest bearing Notes in the Bank	Mortgages on Real Estate	Rate of Interest	Total in- debtedness Dec. 31, 1910	Increase over 1909	Decrease over 1909
					Local	Government Grant	Pay Patients	From other Sources	TOTAL													
1	Pincher Creek Memorial	Pincher Creek	\$ 99.00	\$ 248.64	\$ 1,158.25	\$ 548.25	\$ 2,433.25	\$ 14.45	\$ 4,501.84	\$ 4,141.00	\$ 145.40	\$ 97.85	\$ 34.80	.....	\$ 82.79	\$ 4,501.84	\$ 1,369.26	\$ 993.09	.....	\$ 2,362.35	\$ 1,369.35	.....
2	Galt	Lethbridge	.....	9,771.91	30,575.62	5,119.75	22,673.95	34,328.02	102,469.25	22,102.15	71,012.74	5,876.48	.....	.....	3,477.88	102,469.25	3,062.50	.....	.....	3,062.50	3,062.50	.....
3	General	Macleod	.....	584.37	1,190.50	1,255.25	4,230.54	.....	7,260.66	5,868.05	.....	.....	.....	.....	1,392.61	7,260.66	.....	.....	.....	.....	.....	.....
4	General	Medicine Hat	37,085.44	.....	1,595.35	8,115.00	19,221.10	265.07	66,281.96	18,150.58	16,587.69	2,236.81	153.55	\$ 29,153.33	.....	66,281.96	3,085.44	.....	.....	3,085.44	.....	\$2,069.89
5	Red Deer Memorial	Red Deer	387.98	.....	571.25	965.25	4,549.00	.....	6,473.48	6,257.69	29.25	.....	114.00	72.54	.....	6,473.48	2,452.11	.....	.....	2,452.11	241.33	.....
6	Providence General	Daysland	.....	.....	1,380.70	1,340.60	1,690.58	601.10	5,012.98	1,827.43	500.00	557.60	627.95	1,500.00	.....	5,012.98	.....	.....	.....	.....	.....	.....
7	Public	Bawlf	.....	301.16	.....	1,431.25	4,714.50	.....	6,446.91	4,998.55	245.00	211.00	120.00	.....	872.36	6,446.91	16.00	1,800.00	.....	1,816.00	.....	27.00
8	General	Camrose	.....	18.14	1,279.87	.....	2,461.70	397.10	4,156.81	2,956.57	.....	1,190.89	9.35	.....	.....	4,156.81	.....	.....	.....	.....	.....	.....
9	Scandinavian	Wetaskiwin	200.00	6.52	83.75	657.50	1,460.62	.....	2,408.39	2,268.17	.....	32.25	2.90	50.00	55.07	2,408.39	.....	.....	.....	329.61	29.61	.....
10	Geo. McDougall	Pakan	.....	446.14	245.30	498.00	440.80	387.93	2,018.17	1,371.39	10.60	219.65	.....	300.00	116.53	2,018.17	.....	.....	.....	.....	.....	.....
11	Misericordia	Edmonton	.....	2,020.51	4,826.90	6,162.75	7,943.95	1,095.95	22,050.06	13,947.65	1,293.30	1,784.16	2,191.25	1,500.00	1,333.70	22,050.06	1,094.00	43,000.00	.....	44,094.00	.....	1,526.00
12	City	Edmonton	430.86	335.40	1,295.81	5,735.75	9,242.87	22,865.10	39,905.79	17,431.64	*6,296.24	445.31	732.60	15,000.00	.....	39,905.79	5,586.97	.....	.....	5,586.97	.....	10,762.72
13	General	Edmonton	.....	643.31	696.99	6,509.85	16,806.05	270.54	24,926.74	16,373.64	1,004.19	1,529.52	5,880.00	.....	139.39	24,926.74	8,000.00	90,000.00	.....	98,000.00	.....	.....
14	Isolation	Edmonton	12,538.25	.....	.....	2,040.50	2,668.90	.....	17,247.65	9,082.80	.....	809.99	3,654.94	3,699.92	.....	17,247.65	.....	.....	.....	.....	.....	.....
15	Holy Cross	Calgary	40,000.00	84.58	5,263.10	10,027.75	21,139.15	3,000.00	79,514.58	23,897.95	50,744.96	4,010.12	757.80	.....	103.75	79,514.58	.....	60,000.00	.....	.....	40,000.00	.....
16	Salvation Army	Calgary	.....	202.10	808.00	2,720.75	509.50	182.67	4,423.02	1,992.72	1,141.90	116.70	.....	†567.00	604.70	4,423.02	.....	.....	.....	.....	.....	.....
17	Isolation	Calgary	2,457.24	.....	.....	898.50	1,123.30	.....	4,479.04	3,258.45	.....	451.82	450.00	318.77	.....	4,479.04	.....	.....	.....	.....	.....	.....
18	Public	Strathcona	5,463.99	.....	.....	2,003.00	2,485.25	.....	9,952.24	9,696.38	.....	255.86	.....	.....	.....	9,952.24	.....	.....	.....	.....	.....	.....

IV.—HOSPITALS.

The following hospitals in the province received the government grant of fifty cents per diem for every non-paying patient and twenty-five cents per diem for every paying patient, entering and being treated in these institutions, together with a statement showing the expenditure, revenue and liabilities of such hospitals.

NO.	HOSPITALS	LOCATION	NO. OF PATIENTS	NO. OF DAYS' TREATM'T
1	Memorial.....	Pincher Creek.....	180	2,168
2	Galt.....	Lethbridge.....	632	14,677
3	General.....	Macleod.....	275	3,374
4	General.....	Medicine Hat.....	1,080	16,200
5	Memorial.....	Red Deer.....	200	3,272
6	Providence General.....	Daysland.....	296	4,430
7	Public.....	Bawlf.....	336	4,535
8	General.....	Camrose.....	165	2,231
9	Scandinavian.....	Wetaskiwin.....	97	1,494
10	Geo. McDougall.....	Pakan.....	626	1,146
11	Misericordia.....	Edmonton.....	804	15,435
12	City.....	Edmonton.....	735	13,962
13	General.....	Edmonton.....	1,224	21,566
14	Isolation.....	Edmonton.....	355	6,579
15	Holy Cross.....	Calgary.....	1,592	27,804
16	Salvation Army.....	Calgary.....	103	6,132
17	Isolation.....	Calgary.....	234	3,131
18	General.....	Calgary.....	2,290	35,548
19	Public.....	Strathcona.....	168	4,053
20	General.....	Lacombe.....	78	1,544

V.—CHARITIES.

During the year \$4,341.96 has been expended in relieving sixty-two cases and families in distress caused by destitution, sickness or want in some form, and in connection with the burial of thirty-six paupers.

VI.—INCURABLES.

Within the year ten persons have been cared for as incurables at the Medicine Hat Home for Incurables, and one at the hospital at Pakan by special arrangement.

The writer attended in October the conference of the Dominion and Provincial Health Officers at Ottawa convened by the Conservation Commission.

L. E. W. IRVING, M.D.,
Provincial Medical Officer of Health.

10.—*REPORT OF THE PROVINCIAL SANITARY ENGINEER.*

SIR,—I have the honour to submit the following report on the work of the Sanitary Engineering Branch for the year ending December 31st, 1910.

The work of this branch has to do with the administration of those sections of The Public Health Act which deal with waterworks, sewerage and sewage purification and disposal works. In accordance with these sections of the Act there were submitted to the writer for examination and resubmission to the Provincial Board of Health plans and specifications from several of the cities and towns throughout the province.

Consultations with reference to these works were held with the various city engineers and in some cases with the councils of the various cities and towns also. Consultations with reference to the water, sewerage and sewage purification and disposal works in connection with the various public buildings of the province were held with the Public Works Department.

A water purification plant is being installed at Lethbridge Gaol and sewage purification and disposal works also. A sewage purification and disposal works has been installed at the new asylum at Ponoka.

As member and technical adviser of the Provincial Board of Health the writer assisted the board to draft a new Public Health Act for submission to the Legislature at this year's session and also helped to prepare the regulations which the board propose to issue under the power which will be conferred on it by the new Act.

During the past year the science of sanitary engineering has made distinct advancement, particularly with regard to the cheap purification of both water and sewage by means of hypo-chlorite of lime, and the writer has endeavoured to carry on systematic research work along these lines as far as is possible with his limited equipment. Early in the year the Provincial Board of Health recommended the government to set aside five thousand dollars for the purpose of building and operating an experimental sewage disposal works especially designed to meet the particular climatic and other conditions of the province, and it is hoped that this amount will be granted by the Legislature at their session this year and that the works will be built and in operation early next spring. The chief features in these works will be sedimentation and sterilization.

On October 12th the Commission of Conservation met at Ottawa and adopted the following report of the Committee on Pollution of Waterways, with draft of bill to prevent the pollution of navigable and other waters:

To the Chairman of the Conference of Dominion
and Provincial Health Officers.

SIR,—Your Committee on the pollution of Interprovincial and International waters begs leave to report that:

WHEREAS the pollution of the waterways of the Dominion by raw sewage and factory wastes is a menace to the health of the public generally by reason of the contamination of public water supplies as indicated by the excessive mortality from enteric (typhoid) fever alone, and by the evidence taken and the report made by the Public Health and Inspection of Food Committee of the Senate of the Dominion of Canada; and

WHEREAS the maintenance of the permanent purity of public water supplies is a matter of national importance affecting as it does every citizen whether a resident of our cities and towns or of our rural districts; and

WHEREAS the Provincial Health authorities have jurisdiction only over those waterways lying within the inter-provincial boundaries, and are unable to protect those resident therein against pollution which may happen, either in a contiguous province, or in an adjoining country; and

WHEREAS in some instances these pollutions are great, many being widespread by reason of the immensity of our international waterways upon which there are annually carried some ten millions of people:

The Conference of the Dominion and Provincial Health Officers recommend:

1. That the Government of the Dominion of Canada enact a law prohibiting and penalizing the deposition of raw sewage, garbage and factory wastes in the waterways of Canada and in waters tributary thereto, along the lines of the draft bill herewith, such Act to be administered by the Minister of Agriculture.

2. That the provinces be requested to give effect to such legislation, so that there shall be no conflict of jurisdiction between the Dominion and Provincial Governments in regard to these matters.

3. That the several legislatures of the Dominion of Canada be recommended to insert in their Public Health Acts the following clause:

No by-law providing for the raising of money for the construction, operation or extension of any system of waterworks or common sewer or system of sewerage or sewage disposal shall be submitted to the votes of the electors by the council of any municipality until the consent of the Commissioner of Public Health, or of the Provincial Board of Health as the case may be, to the proposed construction, operation or extension has been first obtained, and the preamble of every such by-law shall declare that such consent has been duly obtained; no debenture shall be valid if issued under any by-law passed in contravention of the provisions of this section.

This clause, we believe, will have the effect of preventing municipalities from evading the present provisions of the Public Health Act in this respect; and

That it be urged upon provincial authorities to adopt legislation providing for the systematic supervision and inspection of all water purification and sewage disposal plants, so that the same be maintained in their efficiency; and

4. That we strongly urge upon the Commission of Conservation to request the Government of the Dominion of Canada to consider the necessity of conferring with the Government of the United States, with a view to preventing any further pollution of international waters.

All of which is respectfully submitted.

Moved by Dr. McCullough,

Seconded by E. M. Wood,

That this report be received and adopted. Carried.

(Sgd.) JOHN W. McCULLOUGH,
Convener of Committee.

In accordance with the desire expressed in clause three of the foregoing the Provincial Board of Health have incorporated this section in the new Public Health Act.

As a member of the Provincial Board of Health the writer attended its various meetings.

Respectfully submitted,

R. B. OWENS,
Provincial Sanitary Engineer.

11.—REPORT OF THE DIRECTOR OF THE PROVINCIAL LABORATORY.

SIR,—I have the honour to present a report covering the work of the Provincial Laboratory for the year ending December 31, 1910.

There has been an increasing demand this year for examinations by the laboratory. This is in part accountable to the opening of new post offices and the extension of railway service to existing offices.

The laboratory furnishes outfits for mailing in specimens for examination to assist in the diagnosis of diphtheria, typhoid fever and pulmonary tuberculosis. Supplies of these outfits are maintained at convenient repositories, chiefly drug stores, of which the following is at present the list:

LIST OF SUPPLY STATIONS.

<i>Post Office.</i>	<i>Name.</i>
Airdrie	Dr. W. F. Edwards.
Banff	National Park Drug Co.
Bentley	Dr. W. G. Evans.
Calgary	1.—Isolation Hospital.
	2.—Oliver Bros. (Druggists).
	3.—Wendell McLean (Druggist).
	4.—Jas. Findlay Drug Co.
Camrose	Dr. Lamb.
Carlstadt	Dr. Mason.
Carmangay	Dr. Bryans.
Carstairs	G. E. Kennedy (Druggist).
Castor	Geo. Brown (Druggist).
Claresholm	O. L. Reincke (Druggist).
Daysland	J. H. Burrows (Druggist).
Didsbury	H. W. Chambers (Druggist).
Edberg	Dr. McLeod
Edmonton	1.—Edmonton Drug Co.
	2.—Norwood Pharmacy.
	3.—J. M. Sissons (Druggist).
	4.—Isolation Hospital.
	5.—Health Department.
Fort Saskatchewan	Dr. P. Aylen.
Frank	Dr. J. W. MacKay.
Gadsby	Dr. H. E. Chatham.
Gleichen	Dr. Wm. Rose.
Hardisty	Eddington Drug Co.
High River	Dr. G. D. Stanley.
Innisfail	Wm. Geary (Druggist).
Irvine	Dr. H. J. Ferguson.
Lacombe	N. I. McDermid (Druggist).
Lamont	Dr. Archer.
Lethbridge	Dr. Campbell.
Lloydminster	Red Cross Pharmacy.
Lundbreck	Dr. A. C. C. Johnston.
Macleod	R. B. Barnes (Druggist).
Magrath	Magrath Pharmacy.
Medicine Hat	1.—Dr. O. Boyd.
	2.—General Hospital.
Nanton	Dr. J. A. Creighton.
Okotoks	G. W. Edmonds (Druggist).
Olds	Dr. R. C. J. Stevens.
Pakan	Dr. C. H. Lawford.
Pincher Creek	E. J. Mitchell (Druggist).
Ponoka	Dr. Campbell.
Prairie Creek	Dr. Meyer.

Raymond.....	Dr. J. H. Rivers.
Red Deer.....	Dr. J. Collison.
St. Albert.....	Laval Drug Co.
Stettler.....	The Dunlop Drug Co.
Stony Plain.....	Dr. R. M. Oatway.
Strathcona.....	Frank Cowles.
Vegreville.....	Drs. Field & Monkman.
Vermilion.....	F. C. Long (Druggist).
Viking.....	Dr. G. E. Story.
Wabamun.....	Dr. C. E. Carthew.
Wetaskiwin.....	1.—Dr. R. D. Robertson. 2.—Humphrey Higgs (Druggist).

The following table shows in brief the numbers and results of examinations made by the laboratory for the diagnosis of communicable diseases:

SPECIMENS EXAMINED FOR DIAGNOSIS OF INFECTIOUS AND CONTAGIOUS DISEASES.

DISEASE	No. of specimens	RESULTS		Specimens sent from No. of		NUMBER RECEIVED EACH MONTH		
		Neg.	Pos.	Phy'ns	P.O.	Typhoid	Diph.	Sputum
Typhoid.....	204	218	57	62	23	Jan.....9	19	15
						Feb.....9	23	21
						Mar.....6	47	32
						April....10	31	39
Diphtheria....	270	224	87	79	30	May.....10	38	38
						June....12	31	32
						July....19	28	20
						Aug....37	21	30
Pulmonary Tuberculosis..	263	222	92	107	40	Sept....43	15	15
						Oct....49	17	20
						Nov....40	16	28
						Dec....31	25	23
Totals for the whole year.....						275	311	314

There were also examined and reported on: Two hundred and seventeen water samples (one hundred and fifty-six chemical, sixty-one bacterial); thirty-four milk samples; nine specimens for diseases of animals (including two for rabies, both of which were negative); and a few miscellaneous samples. For the Department of the Attorney General eleven analyses of liquors and thirty-two medico-legal examinations were carried out.

The position of chemist assistant in the laboratory was only temporarily filled until February of this year, when Mr. H. C. Graham, B.A., was appointed on the laboratory staff. Mr. Graham is a graduate of the University of Toronto, with first-class honours standing in chemistry. Subsequent to his graduation he was Fellow in the Department of Chemistry in the University of Toronto. He therefore came to us with an unusually good training for chemical investigations and I think the department is fortunate in having secured his services for the abundant and varied work involving accurate chemical analysis.

In August I attended the meeting of the Provincial Medical Association, held in Banff, and presented a paper on the subject of public hygiene. This has been published in the Saskatchewan Medical Journal under the title "Conservation of Alberta's Greatest Natural Resource."

In September I attended the annual meeting of the American Public Health Association in Milwaukee, Wisconsin. This is the

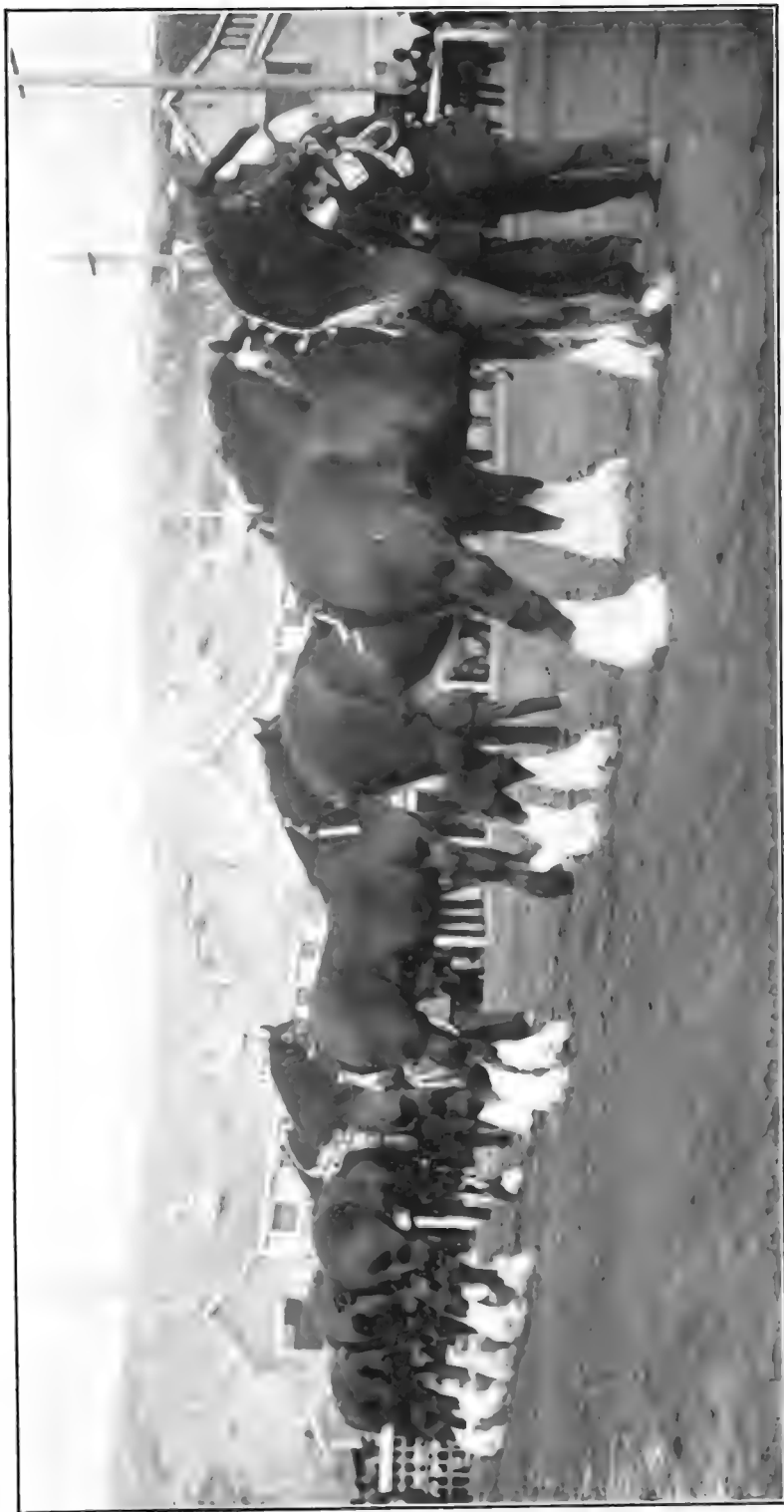
most active and largest public health organization in America, including among its members the leading sanitarians and hygienists of Mexico, Cuba, the United States and Canada. The sessions comprised both general and sectional, the latter relating to the special fields of vital statistics, laboratory work and municipal sanitation and hygiene. Subsequently I visited the health departments and laboratories of Chicago, Ontario, Quebec, Minnesota and Manitoba.

In order to obtain a better understanding by the general public of the purpose and methods of the work of this laboratory, I prepared and submitted a paper on "Water Analysis and the Public Health," before the Union of Alberta Municipalities, at Wetaskiwin, on September 7th. The subject matter of this paper and also other information relating to public health matters in general will be published, agreeably to your instructions, in bulletin form for distribution throughout the province. Hitherto such information has been embodied in this annual report but it should be more useful in the proposed bulletin form. Its omission here makes this much shorter than my previous annual reports.

I have the honour to be, Sir,

Your obedient servant,

D. G. REVELL,
Director Provincial Laboratory.



JUDGING CLYDESDALE STALLIONS AT AN ALBERTA EXHIBITION

12.—REPORT OF THE PUBLICITY BUREAU.

SIR,—I beg to submit herewith a report of the work performed by this bureau during the past nine months since its inception, which marks a new mile post in the operations of the Department of Agriculture.

Possessing unlimited confidence in the opportunities and resources of our province we undertook to establish an organized effort to induce settlers to locate in our province, and we are pleased to report that we have found a very satisfactory response to our call.

Offices were opened at Winnipeg, Toronto and Montreal, and a number of special commissioners were sent into different parts of the United States. Their personal efforts were supplemented by special advertisements in various newspapers, journals and magazines and by special exhibit displays at the Industrial Exhibition at Toronto, Ontario, and at the International Dry Farming Congress at Spokane, Washington.

Our exhibition displays were successful beyond any previous effort and were awarded first prize at both exhibitions. Our splendid success at Spokane, Washington, should be a matter of pride for every citizen of our province as well as one of the best advertisements ever presented by any state or province.

Our offices at Winnipeg, Toronto and Montreal have opened up splendid fields for publicity operations and have provided a permanent base for displaying our resources, distributing literature and attracting settlers.

We have found that hundreds of settlers arrive at Winnipeg daily who seek information there before deciding their destination, and consequently provide a great opportunity for our work.

In order to take advantage of these circumstances we have provided an attractive office in a prominent locality, viz., at 449 Main Street, which has not only attracted hundreds of settlers but has been referred to by public men in very eulogistic terms as an evidence of our enterprise and success.

Our commissioner at this point has displayed ceaseless energy in meeting railway trains (night and day) distributing literature and directing attention to our opportunities and resources; he has acquired a proficiency in this work which has been the means of securing for our province many first class settlers, and not a few business men.

He has distributed a great deal of literature, has received and answered nearly two thousand letters and reports an increasing demand for information both by personal inquiries at his office and correspondence.

Our office at Toronto has provided one of our most successful opportunities and has been conducted in a practical and satisfactory manner. Our commissioner at this point has proved himself to be an active, intelligent and successful advocate; he organized and conducted a special train of settlers consisting of three hundred and twenty passengers into our province during the month of July and has since been instrumental in sending us several large parties from time to time. His monthly reports show an increasing demand for literature and information by callers from all parts of the world, and his average monthly inquiries by letter total about two hundred. He has distributed about two tons of literature and otherwise served our province in a very creditable and efficient manner.

Our operations at Montreal yielded a quick response; we have received three special trains with a total of four hundred and ninety-five passengers, and a large number of smaller companies from time to time. Our commissioner has been able to meet incoming immigrant trains and present our claims to passengers at this point with great success.

His work has been supplemented by the efforts of our special commissioner in the New England States who has been able to induce a large number of settlers to entrain at Montreal for Alberta.

Our office at this point provided a splendid display of our resources for the thousands of visitors who attended the recent Eucharist Conference and our province was in consequence able to command very gratifying attention and commendation.

Our commissioner reports that a large number of those who have recently settled here are sending back favourable reports of conditions here, and he is hopeful of being able to send us an increasing number of good settlers from that locality in the near future.

Our special commissioners were successful in sending us three special train loads of settlers from Michigan with three hundred and forty-one passengers, and a special car from Illinois with sixty-three passengers and small parties following from time to time since. It would be difficult to measure the full extent of the result of their efforts throughout different states but I am assured that a great number of good settlers have come to us through our special efforts.

Our commissioner at Portal found that organized grafters along the Soo line were preying upon American settlers during the early part of this year; immigrants en route to Canada were embarrassed and hampered. A campaign of vilification of Canada and Canadian officials inaugurated which diverted hundreds of settlers intending to make their home here.

This was followed by exaggerated and untruthful reports of the dry weather and returning exodus of settlers by the United States reclamation service, but notwithstanding the strenuous measure adopted by the United States government to check immigration into Canada, we have received a much larger number of settlers during the present season than in any previous year.

Our commissioners have been able to perform a very meritorious service for the various boards of trade throughout the province by obtaining farm labourers and other help, distributing literature, and otherwise aiding in the promotion of local industries.

The activities of my own office can best be summed up by saying that the bureaus proceeded upon the lines laid down at the start, and followed since with such amplification as we have found desirable from time to time.

As you know we operate and conduct a general free information bureau open to all. Beginning on the basis of a local bureau our business has become an institution known all over the world.

Requests for information about Alberta are received from all quarters of the globe.

We furnish these facts; we have compiled statistical information of a class and kind that would best promote all interests of our province; have printed in convenient and concise form literature for free distribution; have prepared and supplied press articles and information for visiting convention delegates, tourists and editorial writers; have held personal interviews with visiting manufacturers, capitalists and others who sought information respecting the opportunities and resources of our province.

We have prepared, printed and distributed about twelve tons of advertising matter.

We have received 2,316 letters and written 3,336 letters.

With reference to our efforts in the Old Country I found that we had contracts in force for advertisements at the first of year amounting to about three thousand dollars per annum; after some investigation we were able to have the same service continued at one thousand dollars less cost.

I find there is an increasing demand for information from England and from emigration reports it would appear that more immigrants have come to Canada this year than ever before, but from what I can learn we are not receiving our share of them.

Other provinces have established agencies in London and elsewhere and in consequence are able to influence the destination of a great number of settlers who might otherwise choose Alberta, and until we can maintain an agency of our own in England, we can hardly expect to receive any considerable portion of the emigration from the Old Country.

We are pleased to report that much of the success of this bureau has been accomplished by the gratuitous co-operation of the various boards of trade throughout our province and the loyal support of the provincial and local press.

I have the honour to remain,

Your obedient servant,

CHAS. S. HOTCHKISS,
Chief Publicity Commissioner.

13.—APPENDICES.

APPENDIX A.

ALBERTA HORSE BREEDERS' ASSOCIATION.

TWELFTH ANNUAL REPORT.

HON. DUNCAN MARSHALL,
Minister of Agriculture.

SIR,—I have the honour to submit herewith the twelfth annual report of the Alberta Horse Breeders' Association for the year 1910.

The annual meeting was held in the City Hall, Calgary, on Monday, April 17th, 1911, the following being the minutes of the meeting:

MINUTES OF THE ANNUAL MEETING.

The minutes of the last meeting were adopted as read.

The president, Mr. George Lane, in the chair.

The president then read his annual report, and the secretary read the secretary's report and financial statement for the year.

Moved by Mr. John A. Turner, seconded by Mr. R. Newbolt (Calgary)—

That these reports be adopted as read. Carried.

Moved by Mr. Turner, seconded by Mr. C. Riddock,—

That the citizens of the cities of Alberta be asked to give special attention to the grade of pavement being laid in their cities so that they will not be dangerous to traffic. Carried.

Moved by Mr. Turner, seconded by Mr. H. Banister,—

That the Calgary Industrial Exhibition Company be asked to supply proper accommodation for heating water for the convenience of exhibitors at the Spring Horse Show and that the Horse Breeders' Association share in the expense of providing same. Carried.

ELECTION OF OFFICERS.

The election of officers and directors was then proceeded with and resulted as follows:

President.....	George Lane, Pekisko.
First Vice-President.....	C. J. Robert, Edmonton.
Second Vice-President.....	Dr. Hargrave, Medicine Hat.
Secretary.....	E. L. Richardson, Calgary.

Breed Directors.

Clydesdales.....	John A. Turner, Calgary.
Shires.....	Geo. Hoadley, Okotoks.
Percherons.....	W. B. Thorne, Aldersyde.
Thoroughbreds.....	O. Critchley, Cochrane.
Standard breds.....	I. G. Ruttle, Calgary.
Coach Breds.....	G. E. Goddard, Cochrane.
Hackneys.....	Wm. Moodie, De Winton.
Ponies.....	O. E. Brown, Calgary.
Suffolk Punch.....	Geo. Jaques, Lamerton.
Belgians.....	Baron Geo. Roels, Pirmez Creek.
Heavy Draught.....	E. D. Adams, Calgary.
Cartage.....	Fred Johnston, Calgary.
Roadsters.....	Geo. T. Haag, Calgary.
Carriage.....	Chas. Riddock, Calgary.
Agricultural.....	H. Banister, Davisburg.
Delivery.....	W. J. Christie, Calgary.
Saddle.....	Count de Roaldes, Kew.

General Directors.

D. Clark, Gleichen.
Thos. McMillan, Okotoks.
D. P. McDonald, Cochrane.

F. N. Bedingfield, Pekisko.
Col. Walker, Calgary.

Moved by Mr. Hoadley, seconded by Mr. Moodie,—
That a director be appointed to represent Shetland Ponies, and that Mr. David Thorburn who arrived at the meeting after the other officers were elected, be nominated a director for Shetland Ponies. Carried.

Mr. Thorburn was declared elected.

Moved by Mr. Turner, seconded by Mr. Laycock,—

That F. R. Exham be official auditor for the year. Carried.

The meeting then adjourned.

ANNUAL REPORT OF THE SECRETARY.

GENTLEMEN,—I take pleasure in presenting herewith the twelfth annual report of the Alberta Horse Breeders' Association being for the year 1910.

SPRING HORSE SHOW.

Great strides are being taken each year in connection with our horse show, and the show of 1910 surpassed its predecessor in many ways. The gate receipts showed an increase of \$2,470, the entries were 310 greater and the amount paid for prizes was \$1,025 greater than the amount paid in 1909. A comparative statement of the number of entries, gate receipts and prizes paid which follows, shows development that any member of the Horse Breeders' Association may well feel proud of:

	1908	1909	1910
Number of entries.....	90	615	925
Gate Receipts.....	No admission charged.	\$2,008.75	\$4,479.70
Prizes paid.....	\$444.57	\$2,708.86	\$3,734.09

The show was formally opened on the evening of April 5th by His Honour Lieutenant Governor Bulyea. The auditorium was crowded to the utmost with visitors from all parts of the province. The attendance was particularly good throughout, and on one or two programmes people had to be turned away as a result of the large attendance. The exhibits both in the breeding classes and the driving, saddle horse and jumper classes were of very high quality, and spoke volumes for the horse breeding and raising possibilities of Alberta. There is still room for improvement in the fitting of some of the entries. Each year advances are noted in this regard. Nothing gives a greater incentive to horse owners to give more attention to the fitting and training of their entries than a horse show.

The judging of the stallion and breeding classes was done at Victoria Park, and the other classes at Sherman's Auditorium. The expense in fitting up the auditorium was, as last year, very heavy, and will continue to be a very heavy charge against the indoor programme until a satisfactory horse show building is erected.

An effort is being made to have a by-law submitted to the property owners of Calgary to provide funds for a stock pavilion and horse show building, and it is hoped that a suitable building will be ready for the horse show of 1912.

A pleasing feature of the horse show of 1910 was the inauguration of a Children's Afternoon at the show. Friday afternoon, April

8th, was set apart for the children, an admission of ten cents was charged, and that our efforts to interest the children were appreciated was amply demonstrated by all available seating accommodation being required for those who attended that afternoon. In connection with this afternoon we had the co-operation of the School Board, superintendent and teaching staff. The success of this feature would indicate that it should be continued at each show, and be the means of interesting the children in horses.

The awards in the several classes were placed by the following judges: Prof. W. L. Carlyle, Moscow, Idaho, Heavy Draught Horses; Mr. H. C. Lawson, Regina, Saddle Horses and Jumpers; and Mr. R. H. Taber, Condie, Sask., Light Harness classes.

The following is a list of the prize winners at the Horse Show, held April 5th to 8th, 1910:

CLYDESDALES.

Stallions, five years and over.

1st	Royal King.....	Walter Moss.....	Shepard.
2nd	Master MacQueen.....	James Clark.....	Crowfoot.
3rd	Sonsie's Best.....	Wm. Moodie.....	De Winton.
4th	Copshaw Special.....	Marshall & Watson.....	Namaka.

Stallions, four years old.

1st	Gay Times.....	James Clark.....	Crowfoot.
2nd	Scotland's Knight.....	Marshall & Watson.....	Namaka.
3rd	Scotland's Magnet.....	A. L. Dollar.....	High River.
4th	Baron Ailsa.....	E. D. Adams.....	Calgary.
5th	Horatio.....	John A. Turner.....	Calgary.

Stallion, three years old.

1st	Col. MacQueen.....	James Clark.....	Crowfoot.
2nd	Wealthy Prince.....	John A. Turner.....	Calgary.
3rd	Economist.....	John A. Turner.....	Calgary.
4th	Allanfarne.....	John A. Turner.....	Calgary.

Stallions, two years old.

1st	Sonsie's Stamp.....	Wm. Moodie.....	De Winton.
2nd	Punctuality.....	John A. Turner.....	Calgary.
3rd	Argaty.....	Harold Banister.....	Davisburg.
4th	Sonsie's Select.....	Wm. Moodie.....	De Winton.

Stallions foaled in 1909.

1st	Middleman.....	John A. Turner.....	Calgary.
2nd	Morpheus.....	Harold Banister.....	Davisburg.

Filly foaled in 1909.

1st	Lady Aberdeen.....	W. B. Edwards.....	Crossfield.
2nd	Venus.....	Harold Banister.....	Davisburg.
3rd	Royal Flush.....	W. B. Edwards.....	Crossfield.

Clyde Stallion, any age, bred in Canada (Registered).

1st	Master MacQueen.....	James Clark.....	Crowfoot.
2nd	Carl MacQueen.....	James Clark.....	Crowfoot.
3rd	Elbow Park Strathmore.....	Marshall & Watson.....	Namaka.
4th	Wawanesa Chief.....	G. E. Goddard.....	Cochrane.
5th	Middleman.....	John A. Turner.....	Calgary.

Mare, three years or over.

1st	Proud Beauty.....	A. J. B. Dewdney.....	Calgary.
2nd	Bogdavia Queen.....	John Clark, Jr.....	Gleichen.
3rd	Maggie Fleming.....	Harold Banister.....	Davisburg.

Two-year old Filly.

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|-----|-------------------------|---------------------|-----------|
| 1st | Poppy..... | John Clark..... | Crowfoot. |
| 2nd | Craigend Bessie..... | Geo. O'Brien..... | Calgary. |
| 3rd | Ruby Brae of Crowfoot.. | John Clark, Jr..... | Crowfoot. |

Three, purebred or grade, any age or sex, bred in Alberta, the progeny of one sire (registered).

- 1st Three progeny of Master MacQueen..... Duncan Clark, Gleichen.
2nd Three progeny of Sonsie's Best..... Wm. Moodie, De Winton.

Best Clydesdale Stallion, any age.

- Champion: Royal King.....Walter Moss.....Shepard.
Reserve: Gay Times.....James Clark.....Crowfoot.

Best Clydesdale Female, any age.

- Champion: Proud Beauty.....A. J. B. Dewdney.....Calgary.
Reserve: Poppy.....John A. Turner.....Calgary.

Best Clydesdale, any age or sex.

- Champion: Royal King.....Walter Moss.....Shepard.
Reserve: Poppy.....John A. Turner.....Calgary.

SHIRES (REGISTERED).

Stallion, three years and over.

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|-----|-----------------------|----------------------|---------|
| 1st | Windbridge Boy..... | W. W. Hunter..... | ..Olds. |
| 2nd | Norley, J. P. 11..... | F. A. McHugh & Sons. | |

Mare, two years old or over.

- 1st Fern.....W. W. Hunter.....Olds.

Best Shire Stallion, any age.

- Windbridge Boy.....W. W. Hunter..... Olds.

Best Shire Female, any age.

- Fern..... W. W. Hunter Olds.

PERCHERONS (REGISTERED).

Stallion, four years and over.

- | | | | |
|-----|---------------|---|----------|
| 1st | Garou | Geo. Lane..... | Pekisko. |
| 2nd | Dentiste..... | W. W. Hunter..... | Olds. |
| 3rd | Gracieux..... | C. R. de la Vergne and L. H. Kennerley. | |

Stallion, three years old.

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|-----|---------------|--|----------|
| 1st | Halifax..... | George Lane..... | Pekisko. |
| 2nd | Hubertin..... | North Dakota Farm Co. & Calgary Colonization
Company. | |
| 3rd | Hoya..... | Geo. Lane..... | Pekisko. |

Stallion, two years old.

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|-----|----------------|-------------------|------------|
| 1st | Illico..... | W. B. Thorne..... | Aldersyde. |
| 2nd | Bonaparte..... | Geo. Lane..... | Pekisko. |
| 3rd | Fairlad..... | E. J. Wigle..... | Calgary. |

Mare, three years and over.

- | | | | |
|-----|---------------|----------------|----------|
| 1st | Bichette..... | Geo. Lane..... | Pekisko. |
| 2nd | Marianne..... | Geo. Lane..... | Pekisko. |
| 3rd | Daisy..... | W. Hoople..... | Calgary. |

Filly, two years old.

1st Isobella.....W. B. Thorne.....Aldersyde.

Best Pecheron Stallion, any age.

Champion: Garou.....Geo. Lane.....Pekisko.
Reserve: Halifax.....Geo. Lane.....Pekisko.

Best Percheron Female.

Champion: Bichette.....Geo. Lane.....Pekisko.
Reserve: Isobella.....W. B. Thorne.....Aldersyde.

BELGIANS.

Stallion, three years and over.

1st Gamin de Querteune....R. Pirmez.....Pirmez Creek.
2nd Pompom.....R. Pirmez.....Pirmez Creek.

Mare, two years and over.

1st Bellone.....R. Pirmez.....Pirmez Creek.
2nd Mathilde.....R. Pirmez.....Pirmez Creek.
3rd Dione.....R. Pirmez.....Pirmez Creek.

Filly, foaled in 1909.

1st Junon.....R. Pirmez.....Pirmez Creek.

Best Belgian Stallion, any age.

Pompom.....R. Pirmez.....Pirmez Creek.

Best Belgian Female, any age.

Bellone:.....R. Pirmez.....Pirmez Creek.

Three (Purebred or Grade, any age or sex), bred in Alberta, the Progeny of one Registered Sire.

Three progeny of Pompon....R. Pirmez.....Pirmez Creek.

SUFFOLK PUNCH (REGISTERED).

Stallion, four years or over.

1st Ashmoor Myrophone....Jaques Bros.....Lamerton.
2nd Rendelsham Benedict....John Lyons.....Cheadle.
3rd Rendelsham Major.....Jaques Bros.....Lamerton.

Stallion, three years old.

1st Moeston Gay Monarch....Jaques Bros.....Lamerton.

Stallion, two years old.

1st Moeston Rufus.....Jaques Bros.....Lamerton.
2nd Rendelsham Beggar.....Jaques Bros.....Lamerton.

Mare, two years or over.

1st Smart.....Jesse Barker & Sons.....Calgary.

Best Suffolk Stallion, any age.

Ashmoor Myrophone.....Jaques Bros.....Lamerton.

HEAVY GRADE FOALS.

Grade foals of both sexes, foaled in 1909.

1st Princess.....Walter Moss.....Shepard.

DRAUGHT HORSES.

Four Horse Team, each team to weigh 1,300 pounds and over.

1st.....	Pacific Cartage Co., Ltd....	Calgary.
2nd.....	Pacific Cartage Co., Ltd....	Calgary.
3rd.....	Pacific Cartage Co., Ltd....	Calgary.

Team in harness only, each horse to weigh 1,500 pounds or over.

1st Bob and Jim.....	J. Jallman & Sons.....	Airdrie.
2nd Jewel and Turline.....	E. J. Wigle.....	Calgary.
3rd Lou and Babe.....	P. Burns & Co.....	Calgary.

Team, in Harness only, each horse to weigh under 1,500 pounds, but not less than 1,300.

1st Her Majesty and Her Ladyship.....	John Clark, Jr., Gleichen.
2nd Briette and Daisy.....	W. Hoople, Calgary.

Mare or gelding, 1,500 pounds or over.

1st Jim.....	J. Hallman & Sons.....	Airdrie.
2nd Bob.....	J. Hallman & Sons.....	Airdrie.
3rd Jewel.....	E. J. Wigle.....	Calgary.

Mare or Gelding under 1,500 pounds but not less than 1,300 pounds.

1st Black Beauty.....	H. C. McDermid.....	Springbank.
2nd Her Majesty.....	John Clark, Jr.....	Gleichen.
3rd Vera.....	E. J. Wigle.....	Calgary.

Pair of Grade Horses, Mares or Geldings, four years old and not over seven.

1st Bob and Jim.....	J. Hallman & Sons.....	Airdrie.
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Heavy Draught Grade Team to be shown in harness only.

1st Bob and Jim.....	J. Hallman & Sons.....	Airdrie.
2nd Lou and Babe.....	P. Burns & Co.....	Calgary.
3rd Chief and Silver.....	Burt Cook.....	Calgary.

Heavy Draught Grade Mare or Gelding.

1st Jim.....	J. Hallman & Sons.....	Airdrie.
2nd Bob.....	J. Hallman & Sons.....	Airdrie.
3rd Babe.....	P. Burns & Co.....	Calgary.

ROADSTERS.

Mare or Gelding, driven by a lady.

1st Needa.....	Dr. Sisley.....	Calgary.
2nd Dime.....	Chas. Riddock.....	Calgary.
3rd Kid.....	Leslie A. Scott.....	Calgary.

Pair of Trotting Mares or Geldings, three years and over.

1st	Lady Lightfoot and Daisy	Wm. Stewart & Co.....	Calgary.
2nd	King and Aggie.....	Chas. Riddock.....	Calgary.
3rd	Penny and Dime.....	Chas. Riddock... ..	Calgary.

Single Trotting Mare or Gelding, three years and over.

1st Needa.....	Dr. Sisley.....	Calgary.
2nd Dime.....	Chas. Riddock.....	Calgary.
3rd Jack Bowen.....	Robt. Suitor.....	Calgary.

Single Trotting Mare or Gelding, three years and over.

1st Ethel Chimes.....	Edwin Auld.....	Edmonton.
2nd Lady Lightfoot.....	Wm. Stuart & Co.....	Calgary.
3rd Fernland Beulah.....	G. E. Goddard.....	Cochrane.

Pair of Pacing Mares or Geldings, three years and over.

- 1st Hazel and Mona I. G. Ruttle & Co. Calgary.
 2nd Queen and Bill I. G. Ruttle & Co. Calgary.

Single Pacing Mare or Gelding, three years and over.

- 1st Lemona I. G. Ruttle Calgary
 2nd Flossie Wilkes Wm. Quesnelle Maple Creek.
 3rd Promptmont Fred Johnston Calgary.

Team of Drivers shown to an appropriate vehicle.

- 1st Rural and Nakusp Joe Murphy Cochrane.
 2nd Nigger and Myrtle Geo. Shortt Red Deer Lake.

CARRIAGE, COACH AND HACKNEY HORSES.

Pair of Mares or Geldings.

- 1st Crispian and Viola Fred Lowes Calgary.
 2nd Robin and Rolly Chas. Riddock Calgary.
 3rd Billiemac and Gay Boy Chas. Riddock Calgary.

Mare or Gelding.

- 1st Going Some Fred Lowes Calgary.
 2nd Spec W. & T. Stewart Priddis,
 3rd Ermine A. J. B. Dewdney Calgary.

High Stepper, Mare or Gelding.

- 1st Going Some Fred Lowes Calgary.
 2nd Crispian Fred Lowes Calgary.
 3rd Spec W. & T. Stewart Priddis.

Pair of High Steppers, Mares or Geldings.

- 1st Crispian and Viola Fred Lowes Calgary.
 2nd Billie Mac and Gay Boy Chas. Riddock Calgary.

Team of Drivers shown to an appropriate vehicle.

- 1st Gorgeous and Mimi G. E. Goddard Cochrane.
 2nd Judge and Jury R. W. Newbolt Calgary.
 3rd Pick and Choose R. F. Bevan Cochrane.

Pony, 14.2 hands and under.

- 1st Jessica G. E. Goddard Cochrane.
 2nd Jacky Miss E. M. Millar Millarville.
 3rd Modesty M. J. Carr Calgary.

Pair of Ponies, 14.2 hands and under.

- 1st Sam and Satan J. R. Thompson Calgary.
 2nd Grey Boots and Smollett C. R. de la Vergne Glenbow.
 3rd Tweedledum and Tweedledee A. C. Landale Millarville.

Cobs, fourteen hands and under fifteen hands.

- 1st Going Some F. C. Lowes Calgary.
 2nd Grey Boots C. R. de la Vergne Glenbow.
 3rd Modesty M. J. Carr Calgary.

TANDEMS, FOUR-IN-HANDS AND COMBINATION HORSES.

Tandems, Light Mares or Geldings, 14.2 hands and over.

- 1st Going Some and So Am I Fred Lowes Calgary.
 2nd Billie Mac and Gay Boy Chas. Riddock Calgary.
 3rd Modesty and Dandy M. J. Carr Calgary.

Four-in-hand, light, 15 hands and over.

- 1st Billie Mac, Robin, Gay Boy and Rolly.....Chas. Riddock, Calgary.
 2nd Harry, Chub, Prince and Aggie.....Chas. Riddock, Calgary.

Combination Horse, Mare or Gelding, 15.1 hands and under.

- 1st Grey Boots.....C. R. de la Vergne.....Glenbow.
 2nd Rowdy.....G. F. Laing.....Calgary.
 3rd Modesty.....M. J. Carr.....Calgary.

Combination Horse, Mare or Gelding, over 15.1.

- 1st Cadet.....F. C. Lowes & Co.....Calgary.
 2nd Whistler.....G. E. Goddard.....Cochrane.
 3rd Colonel.....A. M. McKay, V.S.....Calgary.

Combination Pony, fourteen hands and under.

- 1st Maximus.....Count G. de Roaldes and H. Dumas, Kew.
 2nd Sunshine.....Russell H. Turner.....Calgary.
 3rd Sultan.....Frances Greig.....Calgary.

Saddle Pony, 14.2 hands or under, ridden by girl fifteen years or under.

- 1st Jacobite.....Miss May Green.....Calgary.
 2nd Jacky.....Miss M. Millar.....Millarville.
 3rd Lily.....D. P. McDonald.....Cochrane.

Saddle Pony, 14.2 hands or over, ridden by boy fifteen years or under.

- 1st Jacky.....Miss Mildred Millar.....Millarville.
 2nd Maximus.....G. de Roaldes.....Kew.
 3rd Lily.....D. P. McDonald.....Cochrane.

Pony, 14.2 hands or under, driven by boy or girl, fifteen years or under.

- 1st.....G. E. Goddard.....Cochrane.
 2nd Jacky.....Miss M. Millar.....Millarville.
 3rd Maximus.....G. de Roaldes.....Kew.

SADDLE HORSES.

Saddle Horses, over 14.2 hands, open to Stallions, Mares or Geldings.

- 1st John.....P. Burns & Co.....Calgary.
 2nd Gip.....M. S. McCarthy, M.P.....Calgary.
 3rd Pat.....C. Gardner.....Springbank.

Mare or Gelding, under English stock saddle, over 15.2 hands.

- 1st Cadet.....F. C. Lowes.....Calgary.
 2nd Whistler.....G. E. Goddard.....Cochrane.
 3rd Stoney.....G. de Roaldes and H. Dumas, Kew.

Mare or Gelding, under English or stock saddle, 15½ hands or under, but over 14.2.

- 1st Journalist.....W. J. Watson.....Calgary.
 2nd Rowdey.....J. F. Laing.....Calgary.
 3rd Cottontail.....Miss Elsie D. Millar.....Millarville.

Cobs, fourteen hands and under fifteen hands, shown under English saddle.

- 1st Jessica.....G. E. Goddard.....Cochrane.
 2nd Dexter.....Geo. Tull.....Calgary.
 3rd Jacobite.....Miss May Green.....Calgary.

Ladies' Saddle Horse, Mare or Gelding, 14.3 hands and over.

- 1st Stoney.....Count G. de Roaldes and H. Dumas, Kew.
 2nd Cottontail.....Miss Elsie D. Millar.....Millarville.
 3rd Journalist.....W. J. Watson.....Calgary.

Ladies' Saddle Horse, Mare or Gelding, 14.3 hands or under.

1st	Jessica.....	G. E. Goddard.....	Cochrane.
2nd	Flirt.....	R. Von Strallendorf.....	Millarville.
3rd	Jacobite.....	Miss May Green.....	Calgary.

Military Remount, Mare or Gelding.

1st	Kid.....	George B. Bruce.....	Calgary.
2nd	Slivers.....	Saunders & McCaul.....	Calgary.
3rd	.....	G. Delbeck.....	Calgary.

Light Weight Polo Pony.

1st	Tweedledum.....	A. C. Landale.....	Millarville.
2nd	Stella.....	Herbert Anderson.....	Millarville.
3rd	Flirt.....	R. Von Strallendorf.....	Millarville.

Heavy Weight Polo Pony.

1st	Ginger.....	John M. Jephson.....	Calgary.
2nd	Frank.....	Herbert Hone.....	Midnapore.
3rd	Modesty.....	M. J. Carr.....	Calgary.

Shetland Pony.

1st	Buster.....	Mrs. Moody.....	Calgary.
2nd	Mac.....	H. Hallman.....	Airdrie.
3rd	Sultan.....	Francis Greig.....	Calgary.

Pony, other than Shetland, fourteen hands and under.

1st	Sunshine.....	Russell H. Turner.....	Calgary.
2nd	Mr Brown.....	R. W. Meiklejohn.....	Cochrane.
3rd	Bob.....	Harold Carson.....	Calgary.

Grand Champion Saddle Horse.

Cadet, Champion.....	F. C. Lowes.....	Calgary.
Whistler, Reserve.....	G. E. Goddard.....	Cochrane.
Journalist, Second Reserve.....	W. J. Watson.....	Calgary.

HUNTERS AND JUMPERS.

Hunter, Mare or Gelding.

1st	Stoney.....	Count G. de Roaldes and H. Dumas, Kew
2nd	Slivers.....	Saunders and McCaul.....Calgary.
3rd	Tobie.....	Count G. de Roaldes and H. Dumas, Kew.

Hunter, Mare or Gelding, 14.2 hands and under.

1st	Flirt.....	R. Von Strallendorf.....	Millarville.
2nd	Cigar.....	Jas. Young.....	Gleichen.
3rd	Faugh-A-Ballagh.....	Jessie T. Scott.....	Calgary.

Hunter, Mare or Gelding, over 14.2 hands.

1st	Whistler.....	G. E. Goddard.....	Cochrane.
2nd	Thelma.....	E. H. Abell.....	Cochrane.
3rd	Kelowna.....	Miss H. E. Hutchinson.....	Calgary.

High Jump.

1st	Tobie.....	Count G. de Roaldes and H. Dumas, Kew.
2nd	Smokey.....	D. P. McDonald..... Cochrane.
3rd	Pingo.....	Angus McPherson..... Cochrane.

Mare or Gelding, 14.2 or under.

1st	Blackbird.....	Murray Hendrie.....	High River.
2nd	Sonoma.....	A. M. McKay, V.S.....	Calgary.
3rd	Brownie.....	Mrs. E. A. Atkinson.....	Calgary.

Mare or Gelding, over 14.2 hands.

1st	Journalist.....	W. J. Watson.....	Calgary.
2nd	Dexter.....	Geo. Tull.....	Calgary.
3rd	Elastic.....	L. T. Mewburn.....	Calgary.

Champion Jumper.

Champion:	Stoney.....	Count G. de Roaldes and H. Dumas, Kew.	
Reserve:	Flirt.....	R. Von Strallendorf.....	Millarville.

Light Weight Hunter, Mare or Gelding, four years or over, fifteen hands or over, shown under English saddle.

1st	Journalist.....	W. J. Watson.....	Calgary.
2nd	Tobie.....	Count G. de Roaldes and H. Dumas, Kew.	
3rd	Brown Gelding.....	W. R. Hull.....	Calgary.

Champion Hunter.

Champion:	Whistler.....	G. E. Goddard.....	Cochrane.
Reserve:	Journalist.....	W. J. Watson.....	Calgary.

Half-bred or Thoroughbred Hunters, best calculated to produce Hunters.

1st	Pride of Erin.....	W. E. Butler.....	Ingersoll, Ont.
2nd	Gay Boy.....	David A. Campbell.....	Calgary.
3rd	McIlvain.....	Chas. Riddock for Canadian Bureau of Breeding.	

GENERAL CITY DELIVERY AND DRAY CLASSES.

Light Weight Mare or Gelding shown to express or delivery rig.

1st	Diamond.....	D. G. MacKenzie, Dom. Express Co.,	Calgary.
2nd	Prince.....	Ontario Laundry.....	Calgary.
3rd	Billy.....	Calgary Wine & Spirit Co..	Calgary.

Heavy Mare or Gelding.

1st	Rowdy.....	W. Stuart & Co.....	Calgary.
2nd	Ben.....	Pacific Cartage Co.....	Calgary.
3rd	Major.....	Pacific Cartage Co.....	Calgary.

Heavy Team, as used by wholesalers, retailers or manufacturers.

1st	Lou and Babe.....	P. Burns & Co.....	Calgary.
2nd	Dick and Pete.....	Calgary Brewing & Malting Co.	
3rd	.....	W. Stewart & Co.....	Calgary.

Light Team, as used by wholesalers, retailers and manufacturers..

1st	Jim and Joe.....	Ontario Laundry.....	Calgary.
2nd	.....	Tees & Persse.....	Calgary.
3rd	Prince and Don.....	Ontario Laundry.....	Calgary.

Heavy Team as used by Cartage Company.

1st	.....	Pacific Cartage Co.....	Calgary.
2nd	.....	Pacific Cartage Co.....	Calgary.
3rd	.....	Pacific Cartage Co.....	Calgary.

Cart Horse owned by city or town corporation.

1st	Roy.....	City of Calgary Sanitary Department.
2nd	Victor.....	City of Calgary Sanitary Department.
3rd	Rex.....	City of Calgary Sanitary Department.

Livery Rigs as let for hire.

1st	.....	Chas. Riddock.....	Calgary.
2nd	.....	I. G. Ruttle.....	Calgary.

Pair of Mares or Geldings.

1st	Jerry and John.....	I. G. Ruttle.....	Calgary.
2nd	Robin and Rolly.....	Chas. Riddock.....	Calgary.
3rd	Gay Boy and Billie Mac.....	Chas. Riddock.....	Calgary.

Mare or Gelding.

1st	Major.....	I. G. Ruttle.....	Calgary.
2nd	Dime.....	Chas. Riddock.....	Calgary.
3rd	King.....	Chas. Riddock.....	Calgary.

Mare or Gelding, 14.2 hands or over.

1st	Grey Joe.....	Chas. Riddock.....	Calgary.
2nd	Seucam.....	I. G. Ruttle.....	Calgary.

GENERAL CLASSES.

Best Decorated Turnout.

1st		Pacific Cartage Co.....	Calgary.
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Single Drivers, owned and driven by physicians.

1st	Needa.....	Dr. Sisley.....	Calgary.
2nd	Jack.....	Dr. Douglas W. Gray.....	Calgary.

LIGHT HORSES—THOROUGHBREDS.

Stallion, three years old and over.

1st	Gay Boy.....	David A. Campbell.....	Calgary.
2nd	Charles Martell.....	R. W. Meiklejon.....	Cochrane.
3rd	Impulse.....	John Fulton.....	Kew.

Stallion, two years old.

1st	Tom Carr.....	Walter Sporle, Jr.....	Edmonton.
2nd	Dorando.....	G. E. Goddard.....	Cochrane.

Mare, two years old and over.

1st	My Bouquet.....	N. K. Moody.....	Calgary.
2nd	Bell of Iroquois.....	N. K. Moody.....	Calgary.
3rd		W. and T. Stewart.....	Priddis.

Best Thoroughbred Stallion.

Gay Boy.....	David A. Campbell.....	Calgary.
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Best Thoroughbred Female.

My Bouquet.....	N. K. Moody.....	Calgary.
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Three (Purebred or Grade, any age or sex), bred in Alberta, the progeny of one registered sire.

1st	Three progeny of Lafrasco, R. W. Meiklejon, Cochrane.
2nd	Three progeny of Charles Martell, R. F. Bevan, Cochrane.

Kentucky Bred Saddle Horses.

1st	Black Montrose.....	D. P. Woodruff.....	Caldwell.
2nd	Chestnut Denmark.....	D. P. Woodruff.....	Caldwell.

STANDARD BREDS.

Pacing Stallion, three years old and over, to be shown to harness to an appropriate vehicle.

1st	Halmont.....	W. B. Edwards.....	Crossfield.
2nd	Monie Musk.....	Jas. F. Moodie.....	Calgary.
3rd	Irish Lad.....	Jas. F. Moodie.....	Calgary.

Trotting Stallion, three years old and over.

1st	General H.....	Wm. Parslow.....	Calgary.
2nd	Monie Musk.....	Jas. F. Moodie.....	Calgary.
3rd	Klein Ream.....	Geo. T. Haag.....	Calgary.

Stallion, two years old.

1st	Alberta Boy.....	Geo. T. Haag.....	Calgary.
2nd	Bennie Boy.....	J. W. Hyneman.....	Priddis.

Stallion, foaled in 1909.

1st	Alberta Red.....	Wm. Parslow.....	Calgary.
2nd	Unnamed yearling colt, sire Ping Pong, J. R. Sutherland, Calgary.		
3rd	Game Stratton.....	P. J. Morrow.....	Calgary.

Mare, two years and over.

1st	Bonnie.....	Mrs. J. F. Moodie.....	Calgary.
2nd	Ethel Gaines.....	Edwin Auld.....	Edmonton.
3rd	Fernland Beulah.....	G. E. Goddard.....	Cochrane.

Filly foaled in 1909.

1st	Myrtle H.....	John Page.....	Calgary.
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Best Standard Bred Stallion, any age.

Champion:	General H.....	Wm. Parslow.....	Calgary.
Reserve:	Alberta Boy.....	Geo. T. Haag.....	Calgary.

Best Standard Bred Female, any age.

Champion:	Bonny.....	Mrs. J. F. Moodie.....	Calgary.
Reserve:	Ethel Gaines.....	Edwin Auld.....	Edmonton.

Three (Purebred or Grade), any age or sex.

1st	Three, progeny of Ramona, A. G. Macdonald, Calgary.		
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Best Standardbred Stallion and three of his Progeny.

1st	Klein Ream and three of progeny.		
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HACKNEYS.

Stallion, four years or over.

1st	Devondale.....	W. E. Butler.....	Ingersoll, Ont.
2nd	Terrington Flashlight.....	Baxter-Reed Ranching Co.	Olds.
3rd	Seaham Mason.....	John A. Turner.....	Calgary.

Stallion, any age, shown in harness.

1st	Woodland Sensation.....	J. J. Richards.....	Red Deer.
2nd	Bunch Grass.....	Edwin Townsend.....	Cochrane.

Stallion, three years old.

1st	Firebrand.....	Baxter-Reed Ranching Co.,	Olds.
2nd	Envoy.....	Baxter-Reed Ranching Co.,	Olds.
3rd	Nelson.....	Baxter-Reed Ranching Co.,	Olds.

Mare, two years and over.

1st	Erminie.....	A. J. B. Dewdney (Rev.)..	Calgary.
2nd	Ardinersay Bygrave.....	Wm. Moodie.....	De Winton.
3rd	Warwick Lily.....	John A. Turner.....	Calgary.

Filly, foaled in 1909.

1st	Lady Lyon.....	Rev. A. J. B. Dewdney....	Calgary.
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Three (Purebred or Grade), any age or sex.

- 1st Three sired by Commodore III, Baxter-Reed Ranching Co.
 2nd Three sired by Commodore, Chas. Riddock, Calgary.

Best Hackney Stallion, any age.

Champion: Devondale.....W. E. Butler.....Ingersoll, Ont.

Best Hackney Female.

Erminie.....Rev. A. J. B. Dewdney....Calgary.

COACH BREEDS.

Stallion, three years and over.

- 1st Fra Diavolo.....G. E. Goddard.....Cochrane.
 2nd Unal.....R. F. Bevan.....Cochrane.

Stallion, any age, shown in harness to an appropriate vehicle.

- 1st Fra Diavolo.....G. E. Goddard.....Cochrane.

Mare, two years old and over.

- 1st Gorgeous.....G. E. Goddard.....Cochrane.
 2nd Mimi.....G. E. Goddard.....Cochrane.

Best Coach Stallion.

Fra Diavolo.....G. E. Goddard.....Cochrane.

Best Coach Female.

Gorgeous.....G. E. Goddard.....Cochrane.

Three (Purebred or Grade), any age or sex.

- 1st Three sired by Mercer, G. E. Goddard, Cochrane.
 2nd Three sired by Napoleon 691, D. P. McDonald, Cochrane.

FRENCH COACH SPECIALS.

Grade Carriage Mare or Gelding, 15.2 and over, shown in harness.

- 1st Niger.....D. P. McDonald.....Cochrane.
 2nd Florzel.....D. P. McDonald.....Cochrane.

Grade Saddle Mare or Gelding, 15.1 or over, shown under saddle.

- 1st Florzel.....D. P. McDonald.....Cochrane.

GRADE FOALS (LIGHT).

Grade Foals of both sexes, foaled in 1909.

- 1st Light grade foal.....Dr. de Long.....Calgary.
 2nd Grade foal.....Major C. G. Ross.....Calgary.
 3rd Crosier.....R. F. Bevan.....Cochrane.

IMPROVED TRANSPORTATION ARRANGEMENTS.

A strong effort has been made to secure for the horse show the same transportation arrangements on exhibits as are in force in connection with agricultural exhibitions. The association has had the active co-operation of Mr. M. S. McCarthy, M.P., who has given a great deal of his time to the matter. The question has been taken up with the railway officials at Montreal, by Mr. McCarthy, and

the members of the Dominion Parliament from Vancouver, Winnipeg, Montreal and Ottawa. They have not, however, been successful in obtaining any special rate up to the present.

FINANCIAL STATEMENT.

For the first time since 1904 has it been possible to present a financial statement which does not show an overdraft. Each year since 1904 every effort has been put forth to keep the expense as low as possible, and increase the revenue so as to be able to make a satisfactory financial showing. The prize list, of course, has had to be considerably increased each year, and in spite of this increase it is very gratifying to have been able, owing to an increase of \$400 in the grant from the Alberta Government and an increase in gate receipts, to clear off the deficit in 1909 amounting to \$654.77, and still have a balance on hand of \$534.36. The prize list has been kept down to the lowest possible amount. In many classes the prizes offered are ridiculously small for the competition, quality and value of the stock entered, and in a number of instances where the entries numbered from fifteen to thirty-seven, only two prizes have been offered. Your directors, therefore, felt that it was absolutely necessary to considerably increase the amount of money offered for prizes, and in preparing the prize list for the 1911 show, add upwards of \$1,000 to the list.

On behalf of the Association I wish to thank the Provincial and Dominion Departments of Agriculture and the City of Calgary for grants towards the show, also the merchants and members of the association for donations which made it possible to make such a splendid showing in connection with the financial report. The financial statement which has been duly audited is as follows:

RECEIPTS.

Membership fees.....		\$264.00
Provincial Department of Agriculture..	\$1,200 00	
City of Calgary.....	500 00	
Dominion Department of Agriculture..	216 34	
Donations of goods, plate and medals. .	565.00	
Cash Donations.....	1,035.00	
Canadian Thoroughbred Society special for 1911.....	50.00	3,566.34
Entry fees.....		1,145.50
Gate Receipts.....		4,479.70
Advertising Privileges.....		160.00
Sundries.....		16.12
		\$9,631.66

DISBURSEMENTS.

Prizes paid.....	3,734.09
Ground expenses, rent of rink and extra help.....	2,844.95
Postage, stationery and office expense....	702.21
Secretary's salary.....	500.00
Printing and advertising.....	440.68
Sundries.....	220.60
Overdraft December 31, 1909.....	654.77
Balance on hand December 31, 1910.....	534.36
	\$9,631.66

Audited and found correct, February 4th, 1911.

(Sgd.) F. R. EXHAM.

Your directors have asked the Honourable Minister of Agriculture to make a change in The Stock Inspection Ordinance, so as to permit of purebred and registered horses, as well as horses coming to and from exhibitions, being allowed to move by rail from point to point in Alberta without the necessity of being inspected for brands.

In order to place the association in a position to increase the prize list to what they considered absolutely necessary, your directors made application to the Provincial Department of Agriculture for an increase in the annual grant to the Horse Breeders' Association from \$1,200 to \$2,000. No increase was sanctioned, however, for 1911, and the grant will therefore be the same as in 1910. It is earnestly hoped that the Minister of Agriculture will see his way to increase the grant to \$2,000 for 1912, so that the association may be in a position to provide for its increased financial requirements, as a result of the development of the shows and work of the association.

The association has inaugurated a new system of bringing buyer and seller together. Lists of stock for sale may be sent to the secretary by any member of the association, which will be kept on file for reference and also published from time to time in the agricultural press. Complete lists of stock for sale are sent to all inquirers, and no charge is made to either buyer or seller for this service, which is done in an effort to make the association as great a benefit as possible to the horse breeding interests of the province. Several letters of appreciation have been received since this system has been established.

The following is a comparative statement of shipments of horses over the C.P.R. according to figures kindly supplied by Mr. H. C. McMullen, General Live Stock Agent, in connection with which he makes the following statement:

The remarkable increase in the number of horses sent to market is accounted for by the demand for animals suitable for farm work consequent on the heavy immigration of the last few years. The demand has stimulated breeders to meet the new market, and even with the increased number of men engaged in this branch of the trade, supply has failed to keep pace with the requirements, until the price of ordinary farm horses has reached an almost prohibitive figure. The trade is certain to grow, however, and we may safely anticipate an increase in shipments this year.

SHIPMENTS FOR FOUR YEARS.

<i>Subdivisions.</i>	<i>Year.</i>	<i>No. of Horses.</i>
Edmonton.....	1907	1,215
	1908	424
	1909	1,850
	1910	2,600
Red Deer.....	1907	671
	1908	643
	1909	1,014
	1910	1,965
Wetaskiwin.....	1907	192
	1908	245
	1909	251
	1910	107
Lacombe.....	1907	137
	1908	33
	1909	212
	1910	580
Macleod.....	1907	1,100
	1908	1,108
	1909	1,196
	1910	2,635

For the year ending March 31st, 1909, 10,714 horses and 560 mules were imported into Alberta from United States points by settlers. For the year ending March 31st, 1910, 16,765 horses and 913 mules were imported by settlers.

Shipments of horses over the C.P.R. on the main line east to Moose Jaw for the past six years are as follows:

1905.....	12,882
1906.....	19,549
1907.....	11,382
1908.....	13,636
1909.....	20,211
1910.....	26,068

Respectfully submitted,

E. L. RICHARDSON,
Secretary and Managing Director.

APPENDIX B.

ALBERTA CATTLE BREEDERS' ASSOCIATION.

ELEVENTH ANNUAL REPORT.

HON. DUNCAN MARSHALL,
Minister of Agriculture.

SIR,—I have the honour to submit herewith the eleventh annual report of the proceedings of the Alberta Cattle Breeders' Association for the year 1910.

The annual meeting was held in the association offices, Victoria Park, Calgary, on April 19th, 1911, the following being the minutes of the meeting:

MINUTES OF THE ANNUAL MEETING.

The president, Mr. J. L. Walters, in the chair.

The minutes of the last annual meeting were adopted as read.

Mr. Walters made a few timely remarks, and called upon the secretary to read the annual report and financial statement.

Moved by Mr. Bryce Wright (De Winton), seconded by Mr. Thos. Baird (Red Willow)—

That the report of the secretary and the financial statement be adopted as read. Carried.

The Hon. Duncan Marshall, Minister of Agriculture, was called upon to address the meeting, and explained that at the last session of the Legislature an amendment was made to the Stock Inspection Ordinance, so that railway agents could accept pedigrees of purebred stock in lieu of stock inspection certificates, and that he would have stock inspectors and station agents notified to this effect as soon as he returned to the Department. Mr. Marshall explained to the meeting that it had been impossible to get the brand readers to take on the additional duties in connection with estray animals, particularly bulls. He stated that the pound and herd laws would be revised, and that he would be glad to have any suggestions that any of the cattlemen could make which would assist him in perfecting satisfactory laws in this regard. He considered that the outlook of the cattle industry all over Canada was never better. The United States will soon be importing instead of exporting cattle. He also thought we had an excellent province for cattle raising, and was pleased to see a large number of the wheat growers starting into cattle raising in a small way. He congratulated the Association on their sales which were now an assured success, and would be glad to co-operate with the Association in carrying out any reasonable suggestions.

ELECTION OF OFFICERS.

The election of officers was then proceeded with and resulted as follows:

Hon. President	John A. Turner, Calgary.
President	J. L. Walters, Clive.
First Vice-President.....	Jas. Sharpe, Lacombe.
Second Vice-President	Bryce Wright, De Winton.
Secretary.....	E. L. Richardson, Calgary.

Breed Directors.

Shorthorns.....	A. F. McGill, Lacombe.
Herefords	P. F. Huntley, Lacombe.
Aberdeen Angus.....	Lew Hutchinson, Duhamel.
Galloway	W. E. Tees, Tees.
Holsteins	Thos. Laycock, Calgary.
Ayrshires.....	A. H. Trimble, Red Deer.
Jerseys.....	C. A. J. Sharman, Red Deer.

General Directors.

S. M. Mace, Pekisko.	Thos. Baird, Red Willow.
W. T. G. McClure, Innisfail.	W. P. Williams, Fort Saskatchewan.
Prof. W. J. Elliott, Strathmore.	

Moved by Mr. Sharp, seconded by Mr. Wright,—

That F. R. Exham be appointed auditor for the ensuing year. Carried.

Mr. Duncan Anderson was then called upon to address the meeting, and gave a very interesting and instructive address.

The meeting then adjourned.

ANNUAL REPORT OF THE SECRETARY.

GENTLEMEN,—I beg to present herewith the Eleventh Annual Report of the Cattle Breeders' Association, being for the year 1910.

TENTH ANNUAL AUCTION SALE AT CALGARY.

The tenth annual auction sale held at Calgary on April 6th, 1910, was among the most successful held by the association. One hundred and four animals were sold for \$10,035, an average price of \$96.49. This average appears to be the most satisfactory for the buyer and the seller, judging from the averages of the past sales. When the average is too high the buyers are encouraged to endeavour to secure animals elsewhere, and when the price is too low the breeder is not offered sufficient encouragement to continue as a breeder of purebred stock or a contributor to the sales. The experience is that the happy medium is between \$90 and \$100. Nearly twice as many animals were sold at the Calgary sale in 1910 as at the previous sale, although the average price was \$10.88 lower.

The second annual sale of cattle at Lacombe was held on June 2nd. Fifty-seven animals were sold for an average price of \$59.77, realizing \$5,156.50. At this sale it was decided to include female stock under three years of age. In 1906, owing to the unsatisfactory sales of female stock and the general tendency of the breeders not to offer their best females for sale, together with the difficulty of shipping this class of stock in the same cars with the bulls, and the difficulty in guaranteeing females, it was decided to discontinue the sale of females in connection with the regular auction sale. In connection with the sale at Lacombe it was decided to again try the experiment of offering females. It was thought that if females under the age of three years only were allowed to be offered, buyers would have more confidence in buying females at an auction sale, and a better class of stock would likely be offered, than if aged cows were

permitted to be entered. The experiment scarcely proved successful. Only five heifers were sold at an average price of \$40.50, and these were passed through the ring without receiving the upset price of \$40, and were afterwards sold privately. As a result of this experiment it was again decided to allow bulls only to be sold at association auction sales. The sale of bulls at Lacombe was most satisfactory, although the number of bulls sold was exactly one-half the number sold at Calgary. Now that there have been two sales at Lacombe, the policy of the association in organizing and holding a sale at Lacombe annually, has proven a success. It is doubtful, however, if at the present time there are a sufficient number of breeders and buyers within a small radius of any other point in Alberta to make an annual sale successful. No doubt as the province becomes more thickly settled, it will be possible to hold sales at other points. It must be remembered, however, that since the organization of the first sale by the association, the breeders of Lacombe district have been the largest contributors of stock. Each year the number of buyers have increased in the Lacombe district. The result is that it can safely be said that in the Lacombe district there is a larger number of pure-bred cattle breeders than in any other district of the province. The Lacombe breeders were among the best supporters of the association sales at Calgary, and yet it took these breeders eight years to work up sufficient interest in pure-bred stock in their particular district to warrant the holding of a sale. The sales at Lacombe in 1909 and 1910 would indicate that these sales were started at that point as early as they could reasonably have been expected to be successful.

S. W. Paisley, who has acted as official auctioneer for the Live Stock Associations since their inauguration, again acted as auctioneer at the Calgary sale, and also at the Lacombe sale, giving his usual entire satisfaction, and being most reasonable in his charges.

The following is a statement of the averages obtained for the past ten years,—total of twelve sales. It will be observed that the association has now sold 1,936 animals at an average price of \$88.63, or a total of \$171,581.50, which has been distributed among its members. A statement is also shown giving the names of the contributors receiving the highest price at each sale:

SUMMARY OF SALES FOR TEN YEARS.

Year	Total Number	Average Price	Total Receipts	SHORTHORNS				HEREFORDS				GALLOWAYS				AYRESHIRE				ABERDEEN ANGUS				HOLSTEIN FRIESIAN			
				BULLS		COWS		BULLS		COWS		BULLS		COWS		BULLS		COWS		BULLS		COWS		BULLS		COWS	
				No.	Ave.	No.	Ave.	No.	Ave.	No.	Ave.	No.	Ave.	No.	Ave.	No.	Ave.	No.	Ave.	No.	Ave.	No.	Ave.	No.	Ave.	No.	Ave.
1901	64	\$85.17	\$5,451.00	44	\$90.57	19	\$73.73	14	\$91.42	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1902	220	95.80	21,077.00	183	99.91	8	76.25	14	91.42	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1903	268	96.60	25,890.00	173	93.65	65	96.63	19	135.00	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1904	263	99.79	26,245.00	131	104.23	49	65.22	76	127.17	14	\$91.42	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1905	340	69.28	23,557.00	173	67.84	53	63.45	93	76.21	8	65.00	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1906	170	108.37	18,426.50	95	106.12	23	72.17	37	138.91	7	73.57	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1907	192	73.72	14,538.50	132	74.64	ml	...	50	79.54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1908	111	63.91	7,095.00	67	64.28	...	...	37	64.80	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1909	59	107.37	6,325.00	41	108.17*	...	...	13	101.15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1909	58	82.50	4,785.00	31	91.61†	...	...	12	70.00	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1910	104	96.48	10,035.00	68	91.98*	...	...	20	110.50	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1910	57	90.46	5,156.50	38	97.08†	5	40.50	5	111.00	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1,936	\$88.63	\$171,581.50	1,176	\$90.84	224	\$69.70	376	\$100.52	29	\$75.33	20	\$78.21	10	\$56.90	8	\$50.43	76	\$84.73	11	\$64.25	3	\$76.66				

*Calgary. †Lacombe.

HIGHEST PRICES REALIZED.

1901.—\$250. Shorthorn Bull, sold by P. Talbot & Son, Lacombe.
 1902.—\$290. Shorthorn Bull, sold by John Ramsey, Priddis.
 1903.—\$255. Hereford Bull, sold by O. Palmer, Lacombe.
 1904.—\$285. Shorthorn Bull, sold by Hon. W. Beresford, Calgary.
 1905.—\$225. Shorthorn Bull, sold by D. Sinclair, Innisfail.
 1906.—\$365. Shorthorn Bull, sold by A. F. McGill, Lacombe.
 1907.—\$170. Shorthorn Bull, sold by James Sharp, Lacombe.
 1908.—\$400. Shorthorn Bull, sold by John A. Turner, Calgary.
 Calgary, 1909 { \$180. Shorthorn Bull, sold by Bryce Wright, De Winton.
 { \$180. Shorthorn Bull, sold by Wm. Sharp, Lacombe.
 Lacombe, 1909 { \$150. Shorthorn Bull, sold by Thos. Talbot, Lacombe.
 { \$150. Aberdeen Angus, sold by R. E. Johnston, Lacombe.
 Calgary, 1910 { \$206. Aberdeen Angus, sold by J. H. Fay, Blackfalds.
 { \$200. Shorthorn Bull, sold by Jas. A. Hogge, Okotoks.
 Lacombe, 1910 { \$200. Shorthorn Bull, sold by Wm. Sharp, Lacombe.

Following is a list of prize winners at the Purebred Cattle Show, 1910:

CLASS I.—SHORTHORN BULLS.

Three years and over.

- 1st Habitant, 73773..... Henry Talbot, Lacombe.
- 2nd Carnations Here, 68464..... Jas. Hogg, Okotoks.
- 3rd Scottish Count, 65590..... D. Sinclair, Innisfail.
- 4th Willow Bank Prince, 61952..... John Duncan, Innisfail.
- 5th Knave of Hearts, 66378..... H. J. Scott, Innisfail.

Two years and under thirty months.

- 1st Kaid MacLean, 77574..... J. L. Walters, Clive.
- 2nd King Fisher, 77414..... Theodore Kurp, Lacombe.
- 3rd Indorser, 77278..... Wm. Sharp, Lacombe.
- 4th Grandview Favorite, 77233..... Jas. Wilson, Innisfail.
- 5th S. R. English, Lanuke.

Thirty months and under three years.

- 1st Roan Duke, 75997..... A. H. Bolton, Gladys.
- 2nd Bruce, 75692..... A. S. Fowler, High River.
- 3rd Derby, 74155..... David Martin, Gladys.
- 4th October Lad, 75998..... A. H. Bolton, Gladys.
- 5th Luck, 75688..... A. S. Fowler, High River.

Eighteen months and under two years.

- 1st Dugald, 77569..... J. L. Walters, Clive.
- 2nd Idler, 77281..... James Sharp, Lacombe.
- 3rd Imitator, 77283..... James Sharp, Lacombe.
- 4th Illustrator, 77285..... James Sharp, Lacombe.
- 5th Duke, 77238..... J. Wilson, Innisfail.

Yearlings and under eighteen months.

- 1st Roan Chief, 77256..... S. R. English, Lanuke.
- 2nd Albins..... W. P. Williams, Fort Saskatchewan.
- 3rd Red Salamis, 77870..... W. P. Williams, Fort Saskatchewan.
- 4th Roberts 76554..... John Robinson, Innisfail.
- 5th Lorne Secret, 77871..... W. P. Williams, Fort Saskatchewan.

Best Shorthorn Bull, any age, bred in Alberta.

- Habitant, 73773..... H. Talbot, Lacombe.

Special offered by Canadian Bank of Commerce for best Shorthorn Bull, any age.

- Habitant, 73773..... H. Talbot, Lacombe.

CLASS II.—HEREFORD BULLS.

Three years and over.

- 1st Clifford..... Eric B. Randal, Lacombe.
- 2dn Commodore, 3633..... Geo. Phipps, Cochrane.
- 3rd Lord Leominster, 7203..... H. W. Watkin, Olds.
- 4th Leo, 5932..... W. E. Tees, Tees.

Two years and under thirty months.

- 1st Alberta Hesiod, 8435..... O. Palmer, Lacombe.
- 2nd Alberta Hesiod 2nd, 9139..... O. Palmer, Lacombe.
- 3rd Stanley..... A. Fletcher, Mound.

Eighteen months and under two years.

- 1st Haldane, 8349..... S. M. Mace, Pekisko.
- 2nd Hesper, 8447..... S. M. Mace, Pekisko.
- 3rd Tricks, 9145..... O. Palmer, Lacombe.
- 4th Alberta Hesiod 4th, 9140..... O. Palmer, Lacombe.
- 5th Alberta Hesiod 7th, 9144..... O. Palmer, Lacombe.

Yearlings and under eighteen months.

- 1st Hastings 8448, S. M. Mace, Pekisko.
 2nd Harper, 8440. S. M. Mace, Pekisko.
 3rd Melrose Baron, 9148 P. M. Ballantyne, Lacombe.

Best Hereford Bull, any age, bred in Alberta.

- 1st Haldane, 8349. S. M. Mace, Pekisko.

Best Hereford Bull, any age.

- Haldane, 8349. S. M. Mace, Pekisko.

CLASS III.—ABERDEEN ANGUS BULLS.

Three years and over.

- 1st Black Bearer 2nd. Alex. Shaw, Medicine Hat.

Two years and under three.

- 1st Casa Loma Errol, 2740 F. R. Cathro, Calgary.

Best Aberdeen Angus Bull, any age, bred in Alberta.

- 1st Wilwood Nic. 2nd, 3003. G. G. Melson, Olds.

Under two years.

- 1st Wildwood Nic. 2nd, 3003 . . . G. G. Melson, Olds.
 2nd James Ross, 3091 . . . Thos. Croxford, Airdrie.
 3rd Lord Milner, 3427. Lew Hutchinson, Duhamel.
 4th Vanvliet, 3710. W. T. G. McClure, Innisfail.
 5th Knightly D., 5707 W. T. G. McClure, Innisfail.

CLASS IV.—GALLOWAY BULLS.

Three years and over.

- 1st High Life, 1690 W. E. Tees, Tees.
 2nd Blackfoot, 1691 W. E. Tees, Tees.

Best Galloway Bull, any age, bred in Alberta.

- High Life, 1690 W. E. Tees, Tees.

Best Galloway Bull, any age.

- High Life, 1690 W. E. Tees, Tees.

List of winners at Lacombe Sale, 1910:

SHORTHORNS.

Bull, three years or over.

- 1st Lavender Spartan, 57649 . . . P. Reed, Blackfalds.
 2nd Red Deer 28th, 61089 . . . Robt. Page, Pine Lake.
 3rd Grand View Duke, 78203 . . . E. Richards, Crossfield.
 4th Billy, 64543 E. Plumb, Blackfalds.

Bull, thirty months and under three years.

- 1st Sir Joek A. Burnet, Chigwell
 2nd Pacha Robert Page, Pine Lake.

Eighteen months and under two years.

- 1st Intendant, 77280 Wm. Sharp, Lacombe.
 2nd Idolator, 77286 James Sharp, Lacombe.
 3rd Inheritor, 77273 James Sharp, Lacombe.
 4th Halley, 77940 P. Talbot & Sons, Lacombe.

Yearlings and under eighteen months.

- 1st Greenbank Laddie. Wm. Thirsk, Wetaskiwin.
 2nd Chimes Echo, 73882. Thos Talbot, Lacombe.

Best Shorthorn Bull, any age.

- Champion: Intendant, 77280. Wm. Sharpe, Lacombe.
 Reserve: Idolator, 77286. Jas. Sharpe, Lacombe.

HEREFORDS.

Over eighteen months.

- 1st Goggles of Valley View, 9219. Parker & Evans, Lacombe.
 2nd Alberta Hesiod 5th, 9142. O. Palmer, Lacombe.

Under eighteen months.

- 1st Budget of Valley View, 9215. Parker & Evans, Lacombe.
 2nd Bijou of Valley View, 9224. Parker & Evans, Lacombe
 3rd Melrose Beau, 9372. P. M. Ballantyne, Lacombe.

Best Hereford Bull, any age.

- Champion: Budget of Valley View, 9215, Parker & Evans, Lacombe.
 Reserve: Goggles of Valley View, 9219, Parker & Evans, Lacombe.

ABERDEEN ANGUS.

Over thirty months.

- 1st Blackfalds Leo, 3292. J. Capron, Blackfalds.
 2nd Red Deer Donald. J. A. Collicutt.

Under two years.

- 1st Bal Willow, 3790. W. T. G. McClure, Innisfail.
 2nd Kinkle D., 3709. W. T. G. McClure, Innisfail.
 3rd Leader L., 3827. P. H. Lowe, Blackfalds.

Champion Hereford Bull.

- Bal Willow, 3790. W. T. G. McClure, Innisfail.
 Reserve: Kinkle D., 3709. W. T. G. McClure, Innisfail.

AYRSHIRE BULLS.

Over two years.

- 1st Stoney Croft King. Mr. Boynton.
 2nd Burnside Togo. L. C. Eckenfelder, Trochu Valley.

Under two years.

- 1st Dominion Day, 28049. E. W. Day, Daysland.
 2nd Prospector, 28398. L. C. Eckenfelder, Trochu Valley.

Best Ayrshire Bull, any age.

- Champion: Stoney Croft King. Mr. Boynton.
 Reserve: Dominion Day, 28049. E. W. Day, Daysland.

Aberdeen Angus Heifers.

- 1st Selma. Lew Hutchinson, Duhamel.
 2nd Katydid. Lew Hutchinson, Duhamel.
 3rd Alberta Bird. J. H. Fay, Blackfalds.

Shorthorn Heifers.

- 1st Lady Belle, 86610. A. F. McGill, Clive.
 2nd Lenore G., 86607. A. F. McGill, Clive.
 3rd Verona Vol, 27. A. F. McGill, Clive.

It is gratifying to note that the sales to British Columbia points are increasing. The largest number of animals were sold to British Columbia purchasers in 1910 that have ever been sold at any of the sales of the association. No less than nineteen animals were shipped to the following points in British Columbia: Clinton, Cranbrook, Eugene Valley, and Nicola. An effort has been made by the undersigned during the last few years to interest British Columbia stockmen in our sales, and the number of cattle purchased for that province in 1910 indicated that these efforts are beginning to bear fruit. I hope to be able to increase the sales to that province.

Two years ago the undersigned offered to purchase cattle for any breeders who found it inconvenient to be present personally at the sale. As a result of this announcement orders were received for two bulls. In 1910 the orders for bulls increased to ten. In each case the directions given by the persons wishing to buy were followed as closely as possible, and without one exception satisfaction has been given, and very kind letters received by the association on the delivery of the animals. This is most gratifying as it is a difficult matter to purchase animals for people one does not know. In connection with each only a few words of explanation are usually given as to what kind of animal is required. The success which has attended the purchasing of animals for people unable to be present at the sales, and the large increase in the orders of last year would indicate that the association will continue to enlarge its usefulness by saving the time and expense necessary to come to the sale and purchase personally.

FAT STOCK SHOW.

The fat stock show of 1910 brought out a very creditable number of entries in the cattle classes, the awards being keenly contested in each class. The awards were placed by Mr. Wm. Dryden, of Brooklyn, Ont. There were seventy-four entries in the cattle classes. Following is a list of prize winners in the classes for live animals, and also a list of the animals entered in the slaughter competition giving the live weight, dressed weight, percentage yield, price paid and the winners of the prizes. I also attach hereto the methods of feeding adopted by the winners of the dressed carcass competition:

LIST OF PRIZE WINNERS AT THE FAT STOCK SHOW, 1910.

PUREBRED SHORTHORNS.

Shorthorn Steer, three years and under four, cow or heifer, three years old.

1st	Belvoir Miner.....	Jas. Wilson, Innisfail.
2nd	Orison.....	R. K. Bennett, Midnapore.
3rd	Norma Rose.....	A. H. Bolton, Gladys.
4th	Village Beauty.....	J. McK. Andrews, Davisburg.

Steer or heifer, two years old and under three.

1st	Second to None.....	John Ramsay, Priddis.
2nd	Sunshine.....	Bryce Wright, De Winton.
3rd	White Duke.....	John Ramsay, Priddis.
4th	Crimson Snowball.....	Thos. Croxford, Airdrie.

Steer or heifer, under two years.

1st	Royal Prince.....	John Ramsay, Priddis.
2nd	Lorne.....	John Ramsay, Priddis.
3rd	Admiral.....	J. L. Walters, Clive.
4th	Mac.....	A. F. McGill, Lacombe.

PUREBRED HEREFORDS.

Steer, three years old and under four, cow or heifer, three years old and under five.

- 1st Marie of Melrose.....P. M. Ballantyne, Lacombe.
2nd Nydia.....S. M. Mace, Pekisko.

Steer or heifer, two years old and under three.

- 1st Melrose Belle.....P. M. Ballantyne, Lacombe.

PUREBRED GALLOWAYS.

Steer, three years old and under four. Cow or heifer, three years old or under five.

- 1st Pet of Tees.....W. E. Tees, Tees.

Steer or heifer two years old and under three.

- 1st Lady of Tees.....W. E. Tees, Tees.

*Steer or heifer under two years. **

- 1st Steer.....W. E. Tees, Tees.
2nd Maggie of Tees.....W. E. Tees, Tees.

ABERDEEN ANGUS.

Steer or heifer, two years old and under three.

- 1st Bobby.....Lew Hutchinson, Duhamel.

GRADE STEERS.

Three years old and under four.

- 1st Henry Talbot.....Lacombe..
2nd W. E. Tees.....Tees.
3rd W. E. Tees.....Tees.
4th J. W. Fletcher.....Calgary.

Two years old and under three.

- 1st W. E. Tees.....Tees.
2nd S. M. Mace.....Pekisko.
3rd John Ramsay.....Priddis.
4th S. M. Mace.....Pekisko.

Steer under two years.

- 1st John Ramsay.....Priddis.
2nd W. E. Tees.....Tees.
3rd A. F. McGill.....Lacombe.

GRADE COWS AND HEIFERS.

Three years old and under five.

- 1st Richard Knights.....Millarville.
2nd W. E. Tees.....Tees.

Heifer under two years.

- 1st John Ramsay.....Priddis.

CARLOAD OF FAT CATTLE.

(Dealers and butchers barred.)

- 1st W. E. Tees.....Tees.
2nd J. Riou, Indian Industrial School.....Davisburg.

Open to all.

1st	W. E. Tees.....	Tees.
2nd	J. Riou, Indian Industrial School	Davisburg.

Championship.

"Second to None".....	John Ramsay, Priddis.
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DRESSED CARCASSES.

1st	John Ramsay.	Priddis.
2nd	J. W. Fletcher	Calgary.
3rd	S. M. Mace.	Pekisko.
4th	John Ramsay.	Priddis.
5th	John Ramsay.	Priddis.

Purebred or grade cow or heifer.

1st	Thos. Croxford.	Airdrie.
2nd	Richard Knights.	Millarville.
3rd	S. M. Mace.	Pekisko.
4th	Jas. Wilson.	Innisfail.
5th	A. H. Bolton	Gladys.

Herdsmen's Competition.

1st	John Ramsay.....	Priddis.
2nd	Henry Talbot.....	Lacombe.

JUDGING COMPETITION.

Beef Cattle.

1st	L. G. Evarts	Wetaskiwin.
2nd	T. O. Clark.....	Gilliston.

DRESSED CARCASS COMPETITION.

STEERS.

OWNER	Live Weight	Dressed Weight	Yield Per cent.	Price Per lb.	TOTAL
John Ramsay (1st prize).	1,650	1,027	62 24	12½	\$133 38
John Ramsay	1,290	789	61 16	8½	72 06
John Ramsay	1,030	615	59 70	8½	57 27
A. F. McGill	1,025	582	56 78	8½	54 47
W. E. Tees	1,350	845	62 52	8½	76 82
Henry Talbot	1,585	990	62 46	8½	89 15
Indian Industrial School.	1,085	630	58 07	8½	58 55
S. M. Mace.	1,250	790	63 20	8½	72 15
S. M. Mace (3rd prize)	1,190	725	60 92	10	77 50
H. W. Watkin	1,330	792	59 55	8½	72 32
H. W. Watkin	1,200	690	57 50	8½	63 65
R. K. Bennet	1,425	820	57 54	8½	74 70
L. Hutchinson	965	550	57 00	8½	51 75
J. W. Fletcher (2nd prize)	1,390	895	64 39	11	103 45
	17,765	10,740	60 45		\$1,057 22

COWS.

OWNER	Live Weight	Dressed Weight	Yield Per cent.	Price Per lb.	TOTAL
James Wilson	1,300	810	62 31	7½	\$65.75
R. Knight (2nd prize)	1,470	880	59 86	10	93 00
W. E. Tees.....	970	537	55 36	7½	45 27
S. M. Mace (3rd prize)	1,305	785	60 15	9	75 65
A. H. Bolton	1,195	685	57 32	7½	56 37
J. McK. Andrews.....	1,215	722	59 42	7½	59 15
T. Croxford (1st prize).....	1,080	640	59 26	11½	78 60
	8,535	5,059	59 27		\$473.79

FAT STOCK FEEDING METHODS.

The following are statements of the methods of feeding and feed used by winners in the herdsman's competition at the Provincial Fat Stock Show held April 5th to 8th, 1910, at Calgary:

Mr. Wm. White, herdsman for Jno. Ramsay, Priddis, winner of first prize.

The following is a list of feed consumed per day by champion Shorthorn steer "Second to None":

6 a.m.—1 gallon oat chop, 2 pounds linseed cake.

11 a.m.—1 gallon boiled barley, 1 gallon chopped green feed (mixed).

5 p.m.—1 gallon oat and barley chop, 1 gallon chopped green feed, steamed, with hot water. Hay and water ad. lib.

Last month fed half gallon oat chop and two pounds linseed cake at 8 p.m. extra.

Mr. Henry Talbot, Lacombe, winner of second prize:

"I started to feed last November as much hay and green feed as the animal would eat. Also 4½ pounds chopped grain (two-thirds wheat and barley and one-third oats) twice a day. In December increased the chop to a five pound twice a day. In January 4½ pounds three times a day. In February 5 pounds, and in March 6 pounds three times a day. After that increased it just as he would stand it. He was let out to water twice a day, and kept in a box stall."

Mr. T. Croxford, Airdrie, winner of first prize best female beef dressed carcass, "Crimson Snowball," purebred Shorthorn, aged 2 years:

"I fed her three times a day barley and oat chop and bran mixed, also a little flax seed meal, green feed and hay. She dressed 640 pounds, which I think is the highest record of any heifer of that age in Alberta."

Mr. H. W. Watkins, Olds, winner of first prize as feeder of the best sheep dressed carcass:

"Sheep were out on grass until well on into the winter, and during winter were fed green oat straw and half pound oats per head per day, what hay they would eat up clean and a few turnips on all fine days. All feed raised on the farm. This is the best way I know of from a feeder's and consumer's standpoint."

Mr. W. E. Tees, of Tees, winner of first prize as feeder of best swine dressed carcass:

"While pigs are young, the principal feed they get is oat chops, and as they grow older I add a mixture of barley and oats, and in finishing or fattening my hogs they run to self feeder of barley chop. As I always feed cattle, these hogs have access to the run of the cattle yards, which is a great benefit to them. They also have free run to good spring water, but I never feed slops or cooked feed, so they are simply raised on dry chop feed and pure water, but have the run of the self feeder, which means that they are full of feed all the time."

JUDGING COMPETITION.

The judging competition in connection with the Fat Stock Show has not in the past brought out as large a list of competitors as was expected. Usually the entries are not more than from two to four in each class, and the same persons compete in the various classes. It has therefore been decided to discontinue these competitions, and it seems to be the general opinion that these competitions should be left to the various short course schools now held annually throughout the province by the Department of Agriculture, and the lack of funds makes it necessary to curtail any classes which are evidently not warranted. I attach hereto the financial statement of the Fat Stock Show for 1910 which has been duly audited and found correct. The expenses of the Fat Stock Show have increased considerably during the past few years, particularly in connection with the prizes paid which have increased from \$1,058.50 in 1908 to \$1,636.45 in 1910. During the past few years the revenue of the Fat Stock Show has not increased except in additional entries, and the Alberta Government were therefore asked to increase the grant from \$1,300 to \$1,800 for 1911. The amount of government grant was increased to \$1,400, but unless it is further increased I regret to state that it will be abso-

lutely necessary to cut down the prize list, and otherwise reduce the usefulness of the show unless more revenue is provided, as the loss on the 1910 show was \$572.00. The Sheep and Swine Breeders' Associations have come to the aid of the Fat Stock Show by making a substantial grant to it to clear off the deficit for 1910. The Cattle Breeders' Association would no doubt have assisted in this connection but for the fact that they have to carry a deficit forward of \$275.74.

FINANCIAL STATEMENT OF THE 1910 FAT STOCK SHOW.

Receipts.

Provincial Department of Agriculture, grant.....	\$1,300.00
Dominion Department of Agriculture, grant.....	216.66
J. Y. Griffin & Co., prize.....	25.00
Transferred from Sheep Breeders's Association.....	375.00
Transferred from Swine Breeders' Association.....	250.00
Entry fees.....	170.75
Freight charges.....	84.00
Items charged back to Association and sundries.....	106.73
	\$2,528.14

Disbursements.

Freight paid.....	138.17
Prizes paid.....	1,636.45
Secretary's salary, office expense and rent.....	237.46
Printing and advertising.....	223.05
Grounds expense.....	211.69
Refund freight.....	26.40
Overdraft December 31, 1909.....	.72
Balance on hand.....	54.20
	\$2,528.14

Audited and found correct, 4th February, 1911.

(Sgd.) FRANCIS R. EXHAM,
Auditor.

FINANCIAL STATEMENT.

The following is the financial statement of the Alberta Cattle Breeders' Association for the year 1910. During the year the Alberta Department of Agriculture increased the annual grant to the Association from \$800 to \$1,200, and I wish on behalf of the Association to thank the Honourable Duncan Marshall, Minister of Agriculture, for this increase in the grant, and to express the hope that he will see his way clear to increase the grant to \$1,500, the amount asked for by the association, to enable the association to carry on its work without showing a deficit. The financial statement has been duly audited and found correct:

Receipts.

Membership fees.....	\$101.00
Department of Agriculture, Edmonton, grant.....	1,200.00
Other donations.....	60.00
Entry fees.....	368.00
Freight.....	832.93
Proceeds of sale.....	15,191.50
Advertising.....	33.50
Commission on sales.....	326.00
Freight charged to other Associations.....	155.77
Loading charges.....	40.50
Refunds and sundries.....	182.30
Overdraft.....	275.74
	\$18,767.24

Disbursements.

Overdraft, December 31, 1909.....	\$216.87
Freight charges.....	1,136.03
Secretary's salary.....	500.00
Postage, stationery and office expenses.....	649.60
Printing and advertising.....	448.25
Grounds expense.....	176.97
Sale.....	15,191.50
Sundries including refunds and cross entries.....	152.35
Prizes.....	295.67
	\$18,767.24

Audited and found correct, February 4th, 1911.

(Sgd.) F. R. EXHAM,
Auditor.

Owing to the rapid change which has been going on in Alberta for the past few years from ranching to grain growing and mixed farming, a study of the cattle shipments for the past few years is particularly interesting. Comparative figures have kindly been supplied by Mr. H. C. McMullen, General Live Stock Agent of the C.P.R., in connection with which Mr. McMullen makes the following statement. His figures of course cover the C.P.R. shipments only:

In view of the almost unanimous predictions of the packers, shippers and dealers, current during the past two or three years, that shipments of cattle would shrink materially each succeeding year until the Province of Alberta would be importing stock for local consumption, it is gratifying to note in making an analysis of these figures, that shipments are constantly increasing notwithstanding the gradual disappearance of the large range herds.

It is true large numbers of cows and speyed heifers are being marketed each year, but when it is realized that fifty per cent. of the natural increases in a given herd are females, and but fifty per cent. of that number go for slaughter, it will be seen that twenty-five per cent. of the total increase is reserved to replace the depletion of the herds by age, or the slaughter of the aged breeding stock. To this may be added the large numbers of young breeding cattle constantly being imported from the United States points by settlers which amounted for the year ending March 31st, 1909, to 4,889 cattle, and for the year ending March 31st, 1910, to 7,677 cattle. As the cattle so imported are all breeding stock, and the tendency is to go more extensively into mixed farming operations, I am of opinion the fears of an immediate cattle shortage are largely unfounded.

There were moved all told, 154,540 head, but as this includes 12,000 feeders to be carried over for shipment to this season's market, as well as about 15,000 moved early in the season to new ranges and reshipped in the fall, there remains a net output of only 127,000 head actually having left the ranges, of which 51,627 head were for export.

While market conditions were fairly satisfactory during the entire season, there was considerable loss to the breeder and dealer alike in the early shipping months owing to the shortage of feed and consequent unfinished condition of the cattle. Late rains, however, freshened the range and greatly improved conditions, so that breeders who were fortunate enough to have delayed marketing their stock were greatly benefited thereby.

The best evidence that the live stock industry is not in immediate danger of extinction is shown in the following set of figures covering live stock shipments from the various sections of Alberta now practically given over to farming and animal husbandry.

In addition to the increases shown, nearly all the buyers interviewed agree that farmers and small ranchers from whom they purchased last season are in a position to turn off a greater number of cattle this year than last.

Shipments in four years.

<i>Subdivision</i>	<i>Year</i>	<i>No. of Cattle</i>
Edmonton	1907	4,854
	1908	6,637
	1909	8,756
	1910	14,610

Shipments in four years.—Continued.

<i>Subdivision</i>	<i>Year</i>	<i>No. of Cattle</i>
Red Deer.....	1907	8,054
	1908	12,672
	1909	17,840
	1910	26,856
Wetaskiwin.....	1907	425
	1908	2,172
	1909	5,420
	1910	9,352
Lacombe.....	1907	3,847
	1908	8,223
	1909	11,646
	1910	12,706
Macleod.....	1907	3,818
	1908	8,904
	1909	9,743
	1910	15,943

The following is a comparative statement of the cattle shipped over the Canadian Pacific Railway in Alberta and points on the main line east to Moose Jaw for the past six years:

1905	83,405
1906	111,651
1907	80,043
1908	99,992
1909	127,975
1910	154,340

On behalf of the Alberta Cattle Breeders' Association I wish to thank the Alberta Department of Agriculture for the annual grant and other assistance to the association and to the Fat Stock Show, the Dominion Department of Agriculture for assistance in connection with the judges for the shows.

Respectfully submitted,

E. L. RICHARDSON,
Secretary and Managing Director.

APPENDIX C.

ALBERTA SWINE BREEDERS' ASSOCIATION.

EIGHTH ANNUAL REPORT.

HON. DUNCAN MARSHALL,
Minister of Agriculture.

SIR,—I have the honour to submit herewith the eighth annual report of the work of the Alberta Swine Breeders' Association for the year 1910.

The annual meeting of the association was held in the association offices, Victoria Park, Calgary, on July 6th, 1911, the following being the minutes of the meeting:

MINUTES OF THE ANNUAL MEETING.

In the absence of the president Mr. Hutchinson who regretted his inability to be present at the meeting, Mr. John A. Turner was asked to take the chair.

The minutes of the last meeting were adopted as read.

The secretary then presented the annual report and financial statement for the year.

Moved by Mr. Rice Shepard (Strathcona), seconded by Mr. W. T. Shuttleworth (Gaetz Valley).—

That these reports be adopted as read. Carried.

ELECTION OF OFFICERS.

The election of officers was then proceeded with and resulted as follows:

President.....	Lew Hutchinson, Duhamel.
First Vice-President.....	Rice Shepard, Strathcona.
Second Vice-President.....	W. E. Tees, Tees.

Breed Directors.

Yorkshires ..	N. H. Sorenson, Markerville.
Duroc Jerseys.	Oscar Miller, Cheadle.
Berkshires.....	J. J. Richards, Red Deer.
Tamworths.....	J. Rye, Duagh.
Poland Chinas.	J. A. McCullough, Calgary.

General Directors.

J. H. Elliott.....	Irma.
J. Maurer.....	Clive.
Prof. W. J. Elliott.....	Strathmore.
H. H. Jenkins.....	Pincher Creek.
H. W. Watkin.....	Olds.
Rice Shepard.....	Strathcona.

Moved by Mr. Miller, seconded by Mr. Richards,—

That the election of the above mentioned officers and directors is hereby confirmed. Carried.

Moved by Mr. Shepard, seconded by Mr. Miller,—

That this association ask exhibition companies and agricultural societies to require pedigrees of stock shown in purebred classes to be registered in the exhibitor's name, and in order to encourage exhibits of Alberta owned stock, that they be requested to make classes for boars and sows any age, bred or owned by exhibitor in Alberta, and that these classes be subdivided into classes for various ages as soon as entries justified it, and funds are available. Carried.

Moved by Mr. Shepard, seconded by Mr. Maurer,—

That a recommendation be made to exhibition companies and agricultural societies that where a sow and litter of pigs are exhibited as such, the litter should not have been weaned at the time of the exhibition. If they are weaned the litter should be shown only in the other regular classes. Carried.

Moved by Mr. Miller, seconded by Mr. Maurer,—

That owing to the increase in the number of breeders of Duroc Jersey hogs in Alberta, agricultural societies and exhibition companies be asked to provide separate classes for this breed with suitable prizes. Carried.

Moved by Mr. Richards, seconded by Mr. Tees,—

That the meeting now adjourn. Carried.

ANNUAL REPORT OF THE SECRETARY.

GENTLEMEN,—I present herewith the eighth annual report of the Alberta Swine Breeders' Association being for the year 1910.

ALBERTA PROVINCIAL FAT STOCK SHOW.

The Fat Stock Show of 1910 was held at Calgary, April 5th to 8th, the same dates as the 1909 show, the number of entries for the past few years being as follows:

1907.....	17 entries.
1908.....	19 entries.
1909.....	57 entries and 2 carloads.
1910.....	37 entries and 1 carload.

The association again refunded all freight on swine exhibits to the Fat Stock Show from any railway point in Alberta. Arrangements were again made with P. Burns & Co. to slaughter entries in the dressed carcass competition, and to purchase animals slaughtered on the following basis:

First Prize carcass.....	16c. per lb.
Second Prize carcass.....	15c. per lb.
Balance entered.....	13c. per lb.

Carcasses to be weighed twenty-four hours after being killed.

Following is a list of the prize winners in the swine classes at the Fat Stock Show:

PRIZE WINNERS AT FAT STOCK SHOW.

PUREBRED BERKSHIRES.

Barrow or sow, six months and under twelve months.

1st W. E. Tees.....	Tees.
2nd W. E. Tees.....	Tees.

Barrow or sow under six months.

1st W. E. Tees.....	Tees.
2nd W. E. Tees.....	Tees.

Championship.

W. E. Tees.....	Tees.
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PUREBRED YORKSHIRES.

Barrow or sow, six months and under twelve months.

1st H. W. Watkin.....	Olds.
2nd H. W. Watkin.....	Olds.
3rd H. W. Watkin.....	Olds.

Barrow or sow under six months.

1st H. W. Watkin.....	Olds.
2nd H. W. Watkin.....	Olds.
3rd W. E. Tees.....	Tees.

Championship.

H W. Watkin.....	Olds.
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GRADES (MEDIUM THICK).

Barrow or sow, six months and under twelve months.

1st Thos. Croxford.....	Airdrie.
2nd W. E. Tees.....	Tees.
3rd W. E. Tees.....	Tees.

Barrow or sow under six months.

1st W. E. Tees.....	Tees.
2nd W. E. Tees.....	Tees.
3rd W. E. Tees.....	Tees.

GRADES (BACON TYPE).

Barrow or sow, six months or under 12 months.

1st H. W. Watkin.....	Olds.
2nd H. W. Watkin.....	Olds.
3rd H. W. Watkin.....	Olds.

Barrow or sow under six months.

1st	W. E. Tees.....	Tees.
2nd	W. E. Tees.....	Tees.
3rd	H. W. Watkin.....	Olds.

Best pen of three Bacon Hogs.

1st	H. W. Watkin.....	Olds.
2nd	W. E. Tees.....	Tees.
3rd	Thos. Croxford.....	Airdrie.

Carload lot of not less than twenty head, purebred or grade.

1st	W. E. Tees.....	Tees.
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Championship.

H. W. Watkin.....	Olds.
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Dressed Carcasses (judged from packers' standpoint).

1st	W. E. Tees.....	Tees.
2nd	W. E. Tees.....	Tees.
3rd	W. E. Tees.....	Tees.

Purebred or grade (bacon type).

1st	H. W. Watkin.....	Olds.
2nd	H. W. Watkin.....	Olds.
3rd	H. W. Watkin.....	Olds.

JUDGING COMPETITION.

Swine.

1st	T. O. Clark.....	Gilliston.
2nd	G. A. Stauffer.....	Lacombe.
3rd	W. T. G. McClure.....	Innisfail.

DRESSED CARCASS COMPETITIONS.

Following is a list of the winners in the dressed carcass competition, with the live and dressed weights, and the amount realized:

HOGS.

No.	NAME OF OWNER	Live Weight	Dressed Weight	Per Cent.	Price per lb.	Value Realized
12	H. Watkin.....	2,215	1,824	82.35	13	\$246.43
3	T. Croxford.....	910	774	85.05	13	100.62
2	P. M. Pallantyne.....	220	197	89.55	13	25.61
25	W. E. Tees.....	7,425	6,060	81.62	13	787.80
		10,770	8,855	82.22		

Mr. H. Watkin won first and second prizes.

In the past an exhibitor has been permitted to enter as many animals for the carcass competition as he wished, and the result has been that an exhibitor entering a carload might enter that carload again individually for the carcass competition. This makes it very difficult to be able to check each animal, and the directors decided that in the future exhibitors would only be permitted to enter three animals in each section of the dressed carcass competition.

INTERCHANGE OF STOCK.

Instead of issuing a breeders' directory as was done in 1908 and 1909, the association is endeavouring to bring buyer and seller together, and assist in the interchange of stock by keeping a list of stock for sale on file in the office, and publishing this list from time to time in the agricultural press. The first list was published in the Farm and Ranch Review the week of December 20th, and this service is undoubtedly much appreciated. A number of letters have been received expressing appreciation, and this system will be continued as long as it is felt to be of assistance to the breeders of swine generally.

FINANCIAL STATEMENT.

The financial statement for 1910 is given below. It will be noted that the Swine Breeders' Association have made a grant to the Fat Stock Show to assist in paying off the deficit of 1910. The statement has been duly audited and found correct.

Receipts.

Balance December 31, 1909	\$351 52
Government grant	200.00
Membership fees	109.00
Profits on registration	18.50
Refunds	11 00
	\$690 02

Disbursements.

Freight charges	\$14 00
Prizes	36.39
Secretary's salary, office expense, directors' meetings and delegation	230 65
Printing and advertising	49.36
Transferred to Fat Stock Show	250.00
Balance on hand	109.62
	\$690.02

Audited and found correct. February 4th, 1911.

(Sgd.) F. R. EXHAM,
Auditor.

SHIPMENT OF STOCK.

The following is a comparative statement of the shipment of hogs over the C.P.R. according to figures supplied by Mr. H. C. McMullen, General Live Stock Agent, in connection with which he makes the following statement:

"As predicted early in the season, there has been a falling off in the number of hogs marketed as against the previous year. It is difficult to account for this, as the prices offered and paid during the last two years should have been sufficient inducement for every farmer in the Province to tax the capacity of his land in an effort to meet the demand. Prices have ranged from seven to ten cents with the packing houses prepared to take all offerings. Notwithstanding this, shipments dropped from 60,000 in 1909 to 49,000 in 1910, in a year when the local market would have absorbed 100,000 at highly remunerative figures "

SHIPMENTS FOR FOUR YEARS.

<i>Subdivisions</i>	<i>Hogs</i>	<i>Year</i>
Edmonton.....	19,663	1907
	15,432	1908
	15,347	1909
	13,391	1910
Red Deer.....	7,878	1907
	16,011	1908
	20,053	1909
	15,381	1910
Wetaskiwin	407	1907
	3,467	1908
	7,987	1909
	5,319	1910
Lacombe.....	405	1907
	4,504	1908
	6,468	1909
	4,262	1910
Macleod.....	615	1907
	4,138	1908
	8,969	1909
	7,211	1910

Comparisons of hog shipments over the C.P.R. in Alberta on the main line east to Moose Jaw for the past six years:

1905.....	24,435
1906.....	30,099
1907.....	29,588
1908.....	48,618
1909.....	60,769
1910.....	47,970

I wish again on behalf of the Alberta Swine Breeders' Association, to thank the Departments of Alberta and the Dominion of Canada for the annual grants and assistance in connection with the Fat Stock Show.

Respectfully submitted,

E. L. RICHARDSON,
Secretary and Managing Director.

APPENDIX D.

ALBERTA SHEEP BREEDERS' ASSOCIATION.

NINTH ANNUAL REPORT.

HON. DUNCAN MARSHALL,
Minister of Agriculture.

SIR,—I have the honour to present herewith the ninth annual report of the work of the Alberta Sheep Breeders' Association for the year 1910.

The annual meeting of the association was held in the offices of the association, Victoria Park, Calgary, on July 6th, 1911, the following being the minutes of the meeting:

MINUTES OF THE ANNUAL MEETING.

In the absence of the president, Mr. John A. Turner was asked to take the chair. The minutes of the last annual meeting were adopted as read.

The secretary then read the annual report and presented the financial statement for the year.

Moved by Mr. J. H. Elliott (Irma), seconded by Mr. W. T. Shuttleworth (Gaetz Valley)—

That the annual report and financial statement be adopted as read. Carried.

ELECTION OF OFFICERS.

The election of officers was then proceeded with and resulted as follows:

President.....	Bryce Wright, De Winton.
First Vice-President.....	W. T. Shuttleworth, Gaetz Valley.
Second Vice-President.....	Prof. W. J. Elliott, Strathmore.

Breed Directors.

Shropshires.....	John A. Turner, Calgary.
Leicesters.....	H. W. Watkin, Olds.
Merinos.....	J. R. Daley, Red Deer.

General Directors.

Alex. Shaw.....	Medicine Hat.
H. A. Malcolm.....	Innisfail.
H. H. Jenkins.....	Pincher Creek.
O. E. Brown.....	Calgary.
W. S. Saunders.....	Cochrane.

Moved by Mr. Shuttleworth, seconded by Mr. Daley,—

That F. R. Exham, Deputy Registrar of Land Titles, Calgary, be appointed auditor for the ensuing year, and that the election of officers above be confirmed. Carried.

Moved by Mr. Brown, seconded by Mr. Shuttleworth,—

That this Association ask Agricultural Societies and Exhibition Companies to require pedigrees of stock shown in purebred classes to be registered in the exhibitor's name, and in order to encourage exhibits of Alberta owned stock, that they be requested to make classes for rams and ewes of any age, bred or owned by exhibitors in Alberta, and that these classes be subdivided into classes for various ages as soon as entries justified it, and funds are available, and that all sheep exhibited at summer or fall fairs must have been shorn that year. Carried.

Moved by Mr. Daley, seconded by Mr. Shuttleworth,—

That in view of the serious problem of protecting sheep from coyotes, an urgent request be made by this association to the Alberta and Dominion Departments of Agriculture that a suitable bounty be put on coyotes, which will materially assist in exterminating them and promote the growth of the sheep industry. Carried.

The meeting then adjourned.

ANNUAL REPORT OF THE SECRETARY.

GENTLEMEN,—I beg to submit herewith the Ninth Annual Report of the Alberta Sheep Breeders' Association being for the year 1910.

ALBERTA PROVINCIAL FAT STOCK SHOW.

The Fat Stock Show was again held in conjunction with the other live stock association shows at Calgary on April 5th to 8th. The sheep entries for the past four years were as follows:

1907.....	12 entries.
1908.....	19 entries.
1909.....	52 entries and one carload lot.
1910.....	67 entries and two carload lots.

The association continued the arrangement put in force in 1909, providing free transportation to the Fat Stock Show from any railway point in Alberta. Arrangements were again made with P. Burns & Co. to slaughter and purchase the animals entered for the dressed carcass competition, this firm having offered to pay eighteen cents per pound for the first prize carcass, sixteen cents per pound for the second prize carcass, and thirteen cents per pound for the balance, and seventy-five cents for each hide.

PRIZE WINNERS AT THE FAT STOCK SHOW.

Following is a list of prize winners in the sheep classes at the Fat Stock Show:

PUREBRED SHROPSHIRE.

Ewe or wether, shearling or over.

1st	Dick Brown.....	Calgary.
2nd	H. W. Watkin.....	Olds.
3rd	H. W. Watkin.....	Olds.

Ewe or wether lamb.

1st	Dick Brown.....	Calgary.
2nd	Dick Brown.....	Calgary.
3rd	Dick Brown.....	Calgary.

Champion Shropshire, any age or sex.

Dick Brown.....	Calgary.
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PUREBRED SUFFOLKS.

Ewe or wether, shearling or over.

1st	H. W. Watkin.....	Olds.
2nd	H. W. Watkin.....	Olds.
3rd	W. H. Watkin.....	Olds.

Ewe or wether lamb.

1st	H. W. Watkin.....	Olds.
2nd	H. W. Watkin.....	Olds.
3rd	H. W. Watkin.....	Olds.

Champion Suffolk, any age or sex.

H. W. Watkin..	Olds.
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ANY OTHER PUREBREDS.

Leicesters—Ewe or wether, shearling and over.

1st	H. W. Watkin.....	Olds.
2nd	H. W. Watkin.....	Olds.
3rd	H. W. Watkin.....	Olds.

Southdowns—Ewe or wether, shearling and over.

1st	H. W. Watkin.....	Olds.
2nd	H. W. Watkin.....	Olds.
3rd	H. W. Watkin.....	Olds.

Leicesters—Ewe or wether lamb.

1st	H. W. Watkin.....	Olds.
2nd	H. W. Watkin.....	Olds.
3rd	H. W. Watkin.....	Olds.

DEPARTMENT OF AGRICULTURE

Hampshires—Ewe or wether lamb.

1st H. W. Watkin. Olds.

Champion Southdown.

H. W. Watkin Olds.

Champion Leicester.

H. W. Watkin. Olds.

GRADES OR CROSSES.

Ewe or wether, shearling or over.

1st H. W. Watkin. Olds.
2nd H. W. Watkin. Olds.
3rd H. W. Watkin. Olds.

Ewe or wether lamb.

1st Dick Brown Calgary.
2nd H. W. Watkin. Olds.
3rd H. W. Watkin. Olds.

Carload of not less than twenty head, purebred or grade, any age.

1st H. W. Watkin Olds.
2nd H. W. Watkin. Olds.

DRESSED CARCASSES.

Purebred or grade.

1st H. W. Wtakin Olds.
2nd H. W. Watkin Olds.
3rd H. W. Wtakin. Olds.

Championship.

Dick Brown Calgary.

JUDGING COMPETITION.

Sheep.

1st G. A. Stauffer. Lacombe.
2nd W. T. G. McClure. Innisfail.
3rd T. O. Clark Gilliston.

DRESSED CARCASS COMPETITION.

The following is a list of the winners in the dressed carcass competition, with the live and dressed weights, and the amount realized:

SHEEP.

No.	OWNER	Live Weight	Dressed Weight	Per Cent.	Price per lb.	Value
1	H. Watkin (1st prize).....	. . . .	59		18	\$11.37
1	H. Watkin (2nd prize)...	. . . .	72		16	12.27
38	H. Watkin.....	. . . .	2,012		13	290.06
		4,025	2,143	53.24		
1	D. Brown.	175	97	55.53	13	13.36
		4,200	2,240	53.33		\$327.06

In the past an exhibitor has been permitted to enter as many animals for the carcass competition as he wished, and the result has been that an exhibitor entering a carload might enter that carload again individually for the carcass competition. This makes it very difficult to be able to check each animal, and the directors decided that in the future exhibitors would only be permitted to enter three animals in each section of the dressed carcass competition.

The first prize carcass dressed 59 pounds and realized \$11.37. The second prize dressed 72 pounds and realized \$12.27. These prizes were won by Mr. H. W. Watkin's entries. He also had 38 other sheep for the carcass competition, they dressed a total weight of 2,012 pounds, and realized \$290.06, the total weight of the above animals being 4,025; dressed weight, 2,143, or 53.24 per cent. of the live weight.

Mr. D. Brown also had one entry which dressed 97 pounds or 53.53 per cent. of the live weight, and realized \$13.36.

INTERCHANGE OF STOCK.

During the past two years a breeders' directory has been issued by the association to assist in the interchange of stock of the members of the association. It was considered that a more satisfactory method of bringing buyer and seller together would be for the association to keep a list of stock for sale on file in the office, and each time an inquiry was received for a certain class of sheep, to send the enquiry to all those having stock listed for sale, and also to publish this list of stock for sale and stock wanted from time to time in one or more of the agricultural papers. This list was published in the Farm & Ranch Review on the 20th of December, and the association has received many letters of congratulation and appreciation from both sellers and buyers for inaugurating this system. It is the intention to publish the list from time to time whenever sufficient changes have been made in the list of animals for sale and animals wanted to justify its publication.

FINANCIAL STATEMENT.

The financial statement which has been duly audited is given below. It will be noticed that the association made a grant of \$375 towards clearing off the deficit of the Fat Stock Show for 1910.

Receipts.

Balance on hand December 31, 1909.. . . .	\$395 94
Government grant	400 00
Membership fees	15 00
Registration fees	69 26
Refund	15 00
	\$895 20

Disbursements.

Freight charges	\$48 40
Prizes	51 97
Secretary's salary, office expense, meetings and delegation	261 21
Printing and advertising	44 71
Transferred to Fat Stock Show.....	375 00
Balance on hand	113 91
	\$895 20

Audited and found correct, February 4th, 1911.

(Signed) F. R. EXHAM,
Auditor.

SHEEP COMMISSION.

The Dominion Sheep Commission consisting of Mr. W. A. Dryden, of Brantford, Ont., and Mr. W. T. Richt, of the Department of Agriculture, Ottawa, were appointed to make an investigation and report on the sheep industry in Great Britain, Canada and the United States, and held sittings in Alberta as follows:

Lethbridge.....	March 27th and 28th.
Calgary.....	March 29th and 30th.
Edmonton.....	March 30th and April 1st.

The association communicated with the sheep breeders throughout the province with a view to getting as many sheep breeders as possible to give information at these meetings. The president of the Alberta Sheep Breeders' Association, Mr. Bryce Wright, met the commission at Lethbridge, and attended the sittings at Lethbridge, Calgary and Edmonton. It was generally considered by the sheep breeders attending the meetings that some method should be adopted which would provide cheaper wire netting for fencing, and the general feeling appeared to be that the duty should be removed from sheep fencing coming into Canada from the United States. If this were done it was felt that the sheep breeders would be able to purchase this kind of fencing for from fifteen to twenty per cent. less than at the present time, and as a result a large amount of fencing would be erected on the average farms in Alberta, which would not only keep the sheep on the owners' farm, but keep the coyotes out. This it was felt would materially assist the sheep industry by a large number of small flocks being kept on farms throughout the province.

The regulations regarding government land to be leased for grazing purposes was discussed, and a number of the breeders thought that the Dominion Government should grant a twenty-one year lease to provide for the permanency of tenure, and making it possible for the lessee to put up permanent buildings, etc. Others expressed the opinion that it would be better that the Government should sell such lands which were unsuitable for farming to ranchers at reduced rates, with the provision that such lands must be stocked or otherwise utilized before a title would be granted. The opinion was also given that some method should be adopted whereby sheep or cattle should be grazed on forest reserves under proper supervision.

The question of a market for wool was also discussed, and Mr. Richt, a member of the Sheep Commission, who has spent his life in the wool business, explained to the meeting that it would be necessary for Canadian wool to be placed on the market in a more satisfactory condition before the same prices could be obtained, as the American sheep ranchers to the south of us are obtaining. Mr. Richt gave a most interesting and instructive address on the question of wool, and Mr. Dryden on the question of sheep breeding and the sheep industry generally.

SHIPMENT OF STOCK.

The following is a comparative statement of shipments of sheep over the Canadian Pacific Railway according to figures supplied by Mr. H. C. McMullen, General Live Stock Agent, in connection with which he makes the following statement:

"After deducting from the total number of sheep handled, 7,500 shipped in from Montana, and 5,000 head driven across and shipped from points on our line, there still remains an increase over last year's shipment amounting to 11,000 head.

"This branch of the trade, however, is still in an unsatisfactory condition, as with the normal increases in a flock running to 100 per cent. of the breeding stock each year, we should have at least forty per cent. increase in mutton sheep sent to market. Instead, there is with the exception of some slight fluctuation from year to year, practically no change.

"During the last two years there have been a few small bands scattered among the farmers north and south of Calgary, thus pointing to a tendency to adopt the method pursued in the east, of each farm producing a few. This, in my opinion, is the ultimate destiny of the sheep business.

"For the year ending March 31st, 1909, two hundred and twenty-seven sheep were imported from the United States by settlers. For the year ending March 31st, 1910, one thousand nine hundred and ninety-three sheep were imported by settlers.

SHIPMENTS FOR FOUR YEARS.

<i>Subdivision</i>	<i>Year</i>	<i>Sheep</i>
Edmonton.....	1907	402
	1908	1,061
	1909	1,019
	1910	1,265
Red Deer.....	1907	625
	1908	850
	1909	659
	1910	859
Wetaskiwin.....	1907	...
	1908	...
	1909	200
	1910	441
Lacombe.....	1907	112
	1908	12
	1909	254
	1910	194
Macleod.....	1907	...
	1908	387
	1909	...
	1910	...

"The following is a comparison of sheep shipments over the C.P.R. in Alberta and points on the main line east to Moose Jaw for the past six years:

1905.....	40,810
1906.....	57,024
1907.....	28,573
1908.....	40,753
1909.....	37,024
1910.....	60,458

I wish again on behalf of the association to thank the Alberta and Dominion Departments of Agriculture for the annual grants and for supplying the judges for the Fat Stock Show.

Respectfully submitted,

E. L. RICHARDSON,
Secretary and Managing Director.

APPENDIX E.

FIFTH ANNUAL REPORT OF THE ALBERTA NATURAL HISTORY SOCIETY.

HON. DUNCAN MARSHALL,
Minister of Agriculture.

SIR,—I have the honour to submit herewith the fifth annual report of the proceedings of the Alberta Natural History Society for the year 1910.

The fifth annual meeting of the Alberta Natural History Society was held at Red Deer on November 30th, 1910. The President, Dr. George, called the meeting to order, and asked the secretary to read the minutes of the last annual meeting, which was done and the minutes adopted.

President's Address.

The president gave his annual address, welcoming the members very heartily. The following is a summary of it:

LADIES AND GENTLEMEN,—This is our fifth annual meeting and my address this year will be necessarily short. Several executive meetings were held during the year and they were well attended. The proposed branch at Ponoka fell through owing to Doctor Branden leaving that town.

In February last I gave an address before the members of the Edmonton Natural History Society, with the result that a branch for Edmonton was organized. A branch has also been formed at Erskine, so that now there are four branches, Innisfail, Red Deer, Edmonton and Erskine. A natural history society was formed at Calgary this year but, though asked to form as a branch of the Alberta Society, they preferred to have a local one for Calgary. This is a great pity, but it is hoped they will join the provincial association in the near future. The Red Deer branch has started a library and museum and the branch soon hopes to have a proper place in which to store valuable papers and collections and to hold their monthly meetings.

I thank you very much for the honour you have done me in electing me your president for the last five years. I think now it is time someone else was elected to that office.

I have a few notes of interest to announce to you: The first is an owl's nest. A boy found an owl's nest and reported the find to me. I went with him and was delighted to find the nest and young of the little Arcadian or Saw-Whet owl. It was the first I had seen, and was situated in a hole in the stump of a dead poplar tree. The nest was about six feet off the ground.

The next item was the finding of a nest of eggs of the Blue Jay, by Mr. Robert Keast. I visited the nest and found it situated in a willow. I believe this is the first time that this bird's nest and eggs have been found in Alberta. Mr. McCeown's "Birds of Canada" does not mention its having been found in Alberta.

Thirdly, Mrs. Cassells found a Bohemian Waxwing nesting in a small spruce tree close to her house. I watched the birds with a glass in order to be sure of identification; these birds I had heard nested in the foot hills near Banff, but this is the first time they have nested in this district to my knowledge.

A boy shot an albino specimen of the Yellow Warbler and sent it to the museum. It is pure white and has been mounted.

Mrs. Cassells also reports seeing two three-toed woodpeckers; very interesting, though I have seen these birds before near Innisfail.

Mr. Gregson reported that, though he had carefully fostered for many years a colony of beavers at Blackfalds on the Blindman River, the Indians had cleaned them out. I noticed in a newspaper that some beaver had started work on Col. Walkers' place east of Calgary. I believe Mr. Gregson has seen one or two back on his old place lately.

Captain Keast had mounted for the Red Deer Museum a specimen of a large grey gopher. This is marked different from Richardson's grey gopher, first its size, second its coloration being much more grey especially about the head, third, the length of its tail. I believe it is called Sage's gopher.

Ground-hogs have been more plentiful this year, especially the black varieties.

Judge Lees saw a robin very late in October; he was quite sure of its identification.

I had the opportunity of listening to two lectures given before the Red Deer Branch, one by Mr. Stansell of Edmonton on "Birds," illustrated by splendid lantern slides; those of the Whiskey Jack and Loon being especially good. The other lecture was by Miss Moodie of Calgary, on "Alberta Wild Flowers," illustrated by pressed specimens, and extremely interesting.

SECRETARY-TREASURER'S REPORT.

The secretary-treasurer's financial statement was read, as follows:

Receipts.

To balance on hand.....	\$140.05
" A. Mitchell, subscription.....	.50
" L. B. Potter.....	.50
	\$141.05

Expenditure.

By grant to Innisfail Branch, 1909.....	\$10.00
" News Publishing Co., for insertions.....	3.50
" Dr. George, expenses of banquet.....	3.00
" R. E. Fiske, expenses of attending annual meeting.....	2.00
" W. Geary, expenses of attending annual meeting.....	3.40
" Geo. Henderson, for work on tent.....	1.50
" H. H. Humber, for fountain pen.....	5 75
" Mrs. Ellis, for banquet.....	22 50
" Stationery.....	1 00
" F. W. Galbraith, 50 menu cards, \$3.00; 100 letter heads, \$5.00.....	8 00
" Dr. George, expenses to Edmonton.....	10 00
" J. C. MacKinnon, for typewriting.....	2 50
" Grant to Red Deer Branch, 1910.....	30 00
" Grant to Innisfail Branch, 1910.....	10 00
Balance on hand.....	27.90
	\$141.05

Report was accepted.

In the absence of Captain Keast, Mr. Munro, the secretary of the Red Deer branch, read the report of the branch:

REPORT OF THE INNISFAIL BRANCH.

Mr. Geary, President of the Innisfail Branch, gave the yearly report as follows:

I beg to submit for the consideration of yourself and the executive the following report of our branch for the year just about to close

As you are aware we have not been able to hold regular meetings for some time, owing mainly to the removal from the town of some of our most active and enthusiastic members. However, by dint of perseverance, and as an indirect result of the visit of the Alberta Society to us in July last, we have now been thoroughly reorganized, with a membership that will aggregate over twenty.

The election of officers at our annual meeting in November resulted as follows:

President, Wm. Geary; Vice-President, Rev. M. T. Habershaw; Secretary-Treasurer, Mrs. F. L. Aylesworth; Executive Committee: Mrs. A. E. Keast (Convener), Miss Rankin, F. L. Aylesworth.

Considerable individual work has been done by several of the members, and an effort is being made to tabulate the results.

Our financial statement shows a balance of upwards of \$20. Out of this we still have \$12.50 to pay on a set of the "Standard Library of Natural History," which was bought for the library of the branch. It is pleasing to report that the library now consists of about fifteen volumes.

It is proposed to procure some botanical supplies and a few other working necessities for both field and indoor work.

In closing, allow me on behalf of my branch to express to you and your executive our very great satisfaction and gratitude with respect to your visit on field day last July. It has stimulated us to renewed efforts and I can assure you that we are all looking forward to another day in the field with our Red Deer friends. We hope the next occasion will include also members of other branches of the Association. In this connection I would suggest perhaps a slight change in date for next year, and on our part we will be pleased to show you a different section of our district. On motion of Messrs. Fisher and Geary, report was accepted.

REPORT OF THE EDMONTON BRANCH.

A written report of the Edmonton branch was read by the secretary.

Election of Officers.

Next item of business was election of officers, which resulted as follows:

Hon. President, Hon. Duncan Marshall; Hon. Vice-President, George Harcourt; President, Wm. Geary, Innisfail; First Vice-President, R. E. Fisher, Hillsdown; Secretary, Mrs. F. H. Tallman, Red Deer.

Moved by Mr. Jensen, seconded by Mr. Fisher, that owing to the president living in Innisfail the appointment of secretary-treasurer be left over until the first executive, and that the present secretary continue the work until that time. Carried.

Executive Committee.

Mrs. A. E. Keast, Innisfail; Mr. Jensen, Innisfail; F. S. Carr, Innisfail; Dr. George, Red Deer; Mrs. Wanless, Red Deer; Mr. Sansen, Banff; Mrs. S. Judd, Erskine.

The motion of Mr. Geary and Mr. Fisher, that a hearty vote of thanks be tendered Dr. George for his valued service to the society during his year of presidency, was unanimously carried.

On motion of Mr. Fisher and Mr. Jensen, a hearty vote of thanks was given Miss McKinnon for her services as secretary-treasurer.

Members of the Alberta Natural History Society.

Red Deer.—John A. Grant, J. C. Moore, Capt. J. A. Keast, Robt. Keast, Jennie Keast, Abbie Keast, E. Wilton, Rev. W. G. Moore, John McVicar, Inspector Boyce, H. B. Hill, Mrs. F. Fulman, Mrs. G. W. Greene, Miss Mina Cole, R. E. Fiske, John A. Carswell, F. N. Galbraith, H. G. Munro, John T. Moore, N. J. McLean, Capt. Cottingham, Rev. C. W. Huestis, Mrs. A. P. Wanless, Mrs. R. L. Gaetz, Mrs. Cassells, Mrs. G. F. Root, G. Henderson, Clyde Henderson, Ralph Huestis, Percy Smith, Mrs. Capt. Cottingham, Dr. George, Mrs. George, Miss George, Mr. Lynner, E. Mitchener, M.P.P., Mrs. Gody, Mr. Gody, Mr. Lord, Mrs. Lord, Mrs. J. L. Crawford, Miss Kelley, Mrs. Lawrence, Mrs. Galbraith, Miss J. C. MacKinnon.

Innisfail—Wm. Geary, Rev. M. T. Habershaw, Mrs. F. L. Aylesworth, Mrs. A. E. Keast, Miss Ranking, F. L. Aylesworth.

Edmonton.—F. S. Carr, Inspector J. A. Fife, Miss Kate Chegwin, J. A. Macgregor, Elen B. Chadwick, J. McCaig, S. S. S. Stansell, Inspector Hill, T. Henderson, Miss Brown, Mr. Setlanc, Miss McKee, Miss Osborne, Dr. McQueen, Dr. Revell, Alex. McQueen, Mrs. F. S. Lean, J. M. Shraeck, Miss Beyer, Mrs. J. A. Fife, Mrs. John O. Chatwick, Mr. Walker, Wm. Jones.

Erskine.—Mrs. S. S. Judd (President), S. S. Judd, G. C. Bergman, Mrs. G. C. Bergman, C. B. Morton, Mrs. C. B. Morton, D. H. Lusted, Mrs. D. H. Lusted, Mrs. E. J. Sanders, Mr. Parker, M. Gaughen, B. Wright, Mrs. J. Dew, Miss Archibald, J. C. Turnbull, Mr. Cluterbuck, Jean B. Archibald.

JULIA C. MACKINNON,
Secretary-Treasurer.

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